

AIRFIX magazine

JULY 1970

FOR PLASTIC MODELLERS

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THIS
ISSUE**

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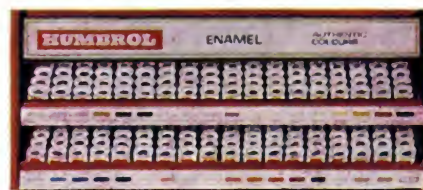
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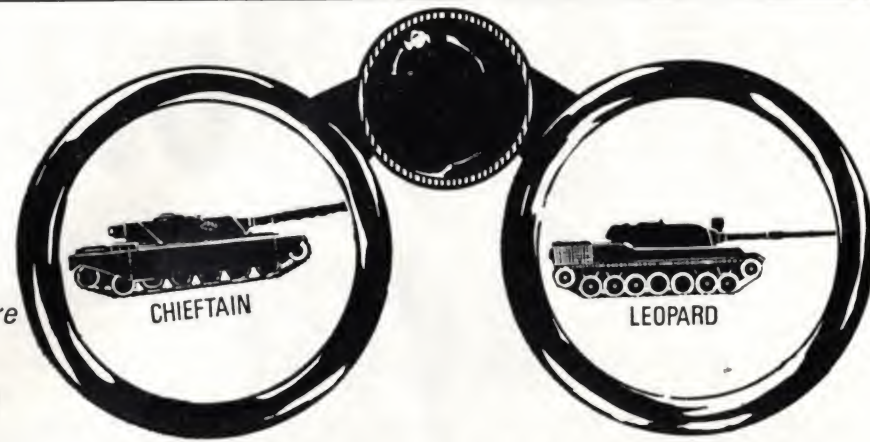
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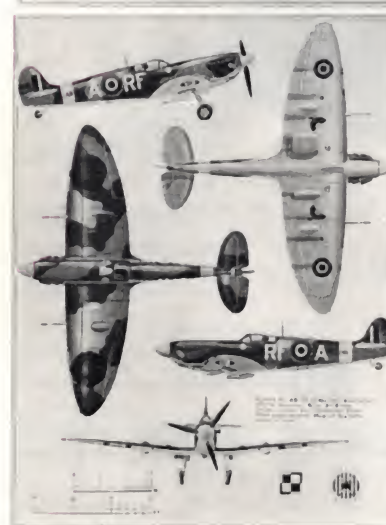
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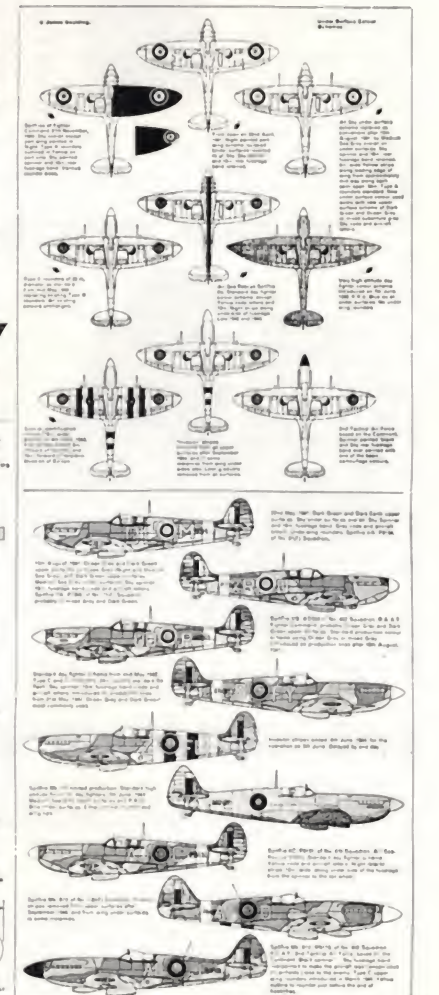
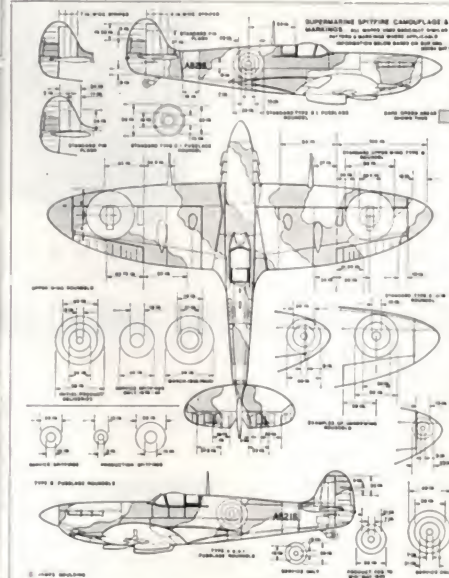
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AIRFIX magazine FOR PLASTIC MODELLERS

July 1970

Volume 11 No 11

Editor Chris Ellis

Cover Picture

As described by Alan Hall on the next page, Phantoms of the Royal Navy Test Squadron from Boscombe Down recently carried out calibration trials aboard HMS Ark Royal, preparatory to the ship embarking her own complement of these aircraft. This view shows an unrehearsed bustle of activity as the flight deck party uses muscle-power to push a recalcitrant aircraft back on to the catapult rollers for re-alignment after the bridge had slipped off prior to take-off. The planeguard Wessex hovers in the background. Of interest are the calibration marks adjacent to the tailplane and the '7' which is also, apparently, a special calibration mark rather than a code number. The very small emblem on the tail is a white 'Omega' superimposed over a small dayglo figure which bears a passing resemblance (possibly co-incidental!) to a certain pipe-smoking politician.

(Photo by Richard E. Gardner)

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MEMBER OF THE AUDIT
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THE first four Royal Navy McDonnell-Douglas Phantoms finished a series of deck landing and take-off trials on board HMS Ark Royal at the end of May.

After the arrival of the first aircraft on March 10, a series of intensive flying trials were undertaken to try out the many new items of equipment in use after the carrier's £30M refit was completed at Devonport where the ship commissioned in February.

Apart from Phantoms, three Buccaneers of No 809 Squadron, two Gannet AEW3s of 849B Flight, a Sea Vixen F(AW)2, the ship's COD Gannet and a brace of Wessex HAS1 aircraft now used for plane-guard duties—took part in a Press demonstration in May to show how the carrier was adapting itself to new aircraft and how the complicated procedure of preparing launch and recovery statistics was prepared.

Before any new equipment such as the Ark Royal's catapults and the redesigned arrestor wire system can be accepted for service, these trials take place over a set period during which many different combinations of aircraft take-off weights are combined with different ship speeds to prepare a graph which



can be used as a ready reckoner for all launch and recovery operations from then on.

Whilst I was on board I saw the Phantoms launched from the angled deck catapult, some with reheats, others with bomb loads and all at different ship speeds. A group of scientists and engineers from the Boscombe Down and Bedford research establishments busily recorded each launch to gather enough data from which to produce the eventual statistics. Similarly all recoveries were recorded so that the maximum permissible landing weights could be discovered and compared with the design limitations. All of the operations were recorded on film by the ship's photographers.

After the calibration work had been completed, Ark Royal put back to Devonport for a leave period which was followed by a six week work-up at sea, just completed, in which the carrier's air group came on board and got used to flying from the deck rather than Yeovilton's runway. By September the Navy's last carrier should be fully operational and ready to leave for the Far East where she is supposed to be used to cover Britain's withdrawal from Singapore.

Land's End to John o' Groats

To prove the long range capabilities of the Navy's new Sea King HAS1 helicopter an aircraft from No 700S Flight at RNAS Culdrose recently completed a non-stop trip from one end of the

Below: A Phantom from Boscombe Down ready for take-off with the Wessex plane-guard helicopter hovering close by and a visiting Wasp in the distance.



Mixture of Phantoms, Buccaneers, and Gannets on the flight deck of Ark Royal during the recent calibration trials. Note the 'non-skid' walkway patches added on the Phantom fuselage.

country to the other in 4 hours 19 minutes 21 seconds. No British service helicopter has previously attempted such a long journey and the Sea King provided much useful data apart from setting up a record for the trip.

The flight was an 'observed performance' by the Royal Aero Club, whose officials watched the departure from Land's End. The arrival at Duncansby lighthouse, John o' Groats, was recorded and 'phoned back to the departure point and then the Sea King, piloted by Lieut-Commander Victor Sirett, flew on another 60 miles to land and refuel at RNAS Lossiemouth.

The record trip, which was done at an average speed of 121.15 knots, covered a distance of 602.95 miles. The aircraft used was Sea King XV649:587, fitted with long range tanks.

The Sea King has been undergoing intensive flying trials with No 700S Flight at Culdrose since August 1969 and the first operational squadron, No 824, was formed in February this year. The trials programme was completed in May and No 700S Flight has now disbanded.

Jolly Green Giant in UK

The 67th Aerospace Rescue and Recovery Squadron USAF are now operating three HH-3E Jolly Green Giant helicopters from RAF Woodbridge, Suffolk, alongside the HC-130 aircraft which arrived from Moron Air Base, Spain, in January.

The aircraft formerly belonged to the 58th ARRS at Wheelus Air Base in Libya before the closure of that airfield and are the only aircraft of their type to operate air rescue missions in Europe for the United States Air Force.

I went to see the new aircraft recently and also asked about the operations on which they might be flying in the future.

From my investigations I was able to find out that the Air Rescue squadrons now use the helicopter almost exclusively for pick-up operations no matter where these might occur. Even though an aircraft may have crashed many miles from Woodbridge, the Jolly Green Giants would be scrambled to make the rescue. The secret of these missions is, of course, the ability of the helicopter to be refuelled in flight and a tanker HC-130 always goes with them. Operating a sort of shuttle service, the tanker flies ahead of the helicopters and with its sophisticated electronic and radio equipment seeks out the downed aircraft, returning to the helicopter as and when it needs to take on more fuel.

Once the location of the crash has been established, the HC-130

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either drops life rafts or survival equipment and, if necessary, pararescue men drop on to the scene.

Although the HC-130s at Woodbridge are still equipped for the task of picking up aircrew by the prongs mounted on the aircraft nose (see February *Airfix Magazine*), this method has now become non-operational and only one unit, in the Azores, still uses it. The equipment is still kept on the squadron but will not be used at the present time.

Seven Hercules are already at Woodbridge including one of the latest aircraft in the series, an HC-130N, which only came off the production line four months ago. This aircraft does not have the prongs mounted on the nose and is equipped as a tanker as well as an air-sea rescue aircraft. The eventual complement of the squadron will be nine aircraft, all of which should have been delivered by June. Four HH-3Es will also be available, three of which had arrived by the end of May.

The 67th ARRS maintains one HC-130 on a constant 30 minute alert during daylight hours and 45 minutes after dark. The helicopters are on two-hour standby. Their headquarters, the 40th Aerospace Rescue and Recovery Wing, is based at Ramstein, Germany, and controls all operations in Europe, Africa and as far away as the Indian Ocean. During 1969, aircraft from the Wing flew 14,150 hours on 7,840 missions during which time they helped to save the lives of 2,603 people and three aircraft.



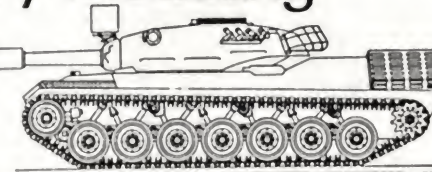
Above: HC-130 Hercules and HH-3E Jolly Green Giant, both of 67th ARRS now based at Woodbridge, Suffolk. Below: Sea King XV649:587 of 700S Sqn over Land's End at the start of the recent record flight.



Military Modelling

by

Chris Ellis



Sd Kfz 233 and 263

TO continue our repeat of the German armoured car conversions we look at two earlier eight-wheelers, the Sd Kfz 233 and Sd Kfz 263 Funkwagen, which can utilise the earlier mudguards wrongly supplied in the Sd Kfz 234/4 kit. The early type of 'split' mudguard would be difficult to make from scratch for these two models—which are otherwise fairly simple. Before starting either of them, however, plug the mudguard locating slots by cementing the mudguards firmly in place and then removing them again with a knife so that the lug remains in the slot. When you later re-affix the mudguards, the upper surfaces should be cemented level with the lower edges of what were the locating slots.

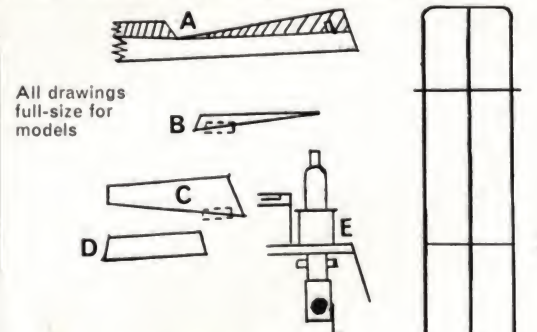
Looking at template A, you will see that both the fighting compartment coaming and a portion of the engine casing has to be removed from each side. This latter surgery is to alter the rear hull profile from horizontal in the diesel-engined 234 to sloping in the Bussig V8 petrol-engined 233, and is accounted for by the difference in size of the installation.

With the engine cover at its new angle an unavoidable gap is left around the edges, which must be filled with plastic putty and later filed to give a neat joint.

A 7 mm deep strip of styrene sheet or card is next cemented ahead of the engine cover to increase its length, while side extensions (B) are cemented on each side in line with the slope of the hull.

A new rear bulkhead is then required, level with the top of the heightened hull sides. Part 17 in the kit (upper hull front) is modified by the removal of the right-hand half of the roof, while the sides and top of the driving compartment are covered with styrene sheet.

The 7.5 cm L/24 gun, mounted to the right, can be made by cutting down the cradle, trunnions and breech from the kit with a mantlet and barrel from scrap—a tank transporter bogie is perfect for the barrel. Location is shown in E, where you will also see the position of a styrene strip which passes across the front of the fighting compartment above the mantlet.



Key: (A) Plan view of rear hull sides (parts 10-11). Remove shaded portions (Sd Kfz 233 and 236). (B) Hull top extension for Sd Kfz 233. Visor shown dotted. (C and D) Hull top extensions for Sd Kfz 263 Funkwagen. (E) Plan view of 7.5 cm gun, showing location to right of driving compartment. (F) Plan view of aerial for Sd Kfz 263.

Continued on page 515

SEVEN WEEK WAR



by ROBERT C. GIBSON

Part 3: Other infantry styles

THE Austrian army in 1866 still wore the traditional white of the old Holy Roman Empire in the form of white tunics, piped front and bottom in the regimental colours. The cuffs, collar and shoulder straps were also in the regimental colours. A black shako with a waterproof cover was worn. The 'German' regiments, ie, the non-Hungarian regiments, wore sky-blue trousers with white seams. The Hungarian regiments* wore sky-blue 'tights', with decorative 'knots' and seams in black/yellow tape, and short black boots. The crossbelts were white, the blanket roll grey. Buttons were brass or silver according to regiment. For example:

- Ist Corps:** 30th Reg (Martini), light-grey/brass buttons
34th Regt (King of Prussia)*, bright red/silver buttons
- IInd Corps:** 57th Regt, light red/brass buttons
- IIIrd Corps:** 46th Regt (Saxe Meiningen)*, parrot-green/brass buttons
62nd Regt (Archduke Henry)*, grass green/silver buttons
- IVth Corps:** 51st Regt*, ash-grey/brass buttons
67th Regt*, lobster-red/silver buttons
68th Regt*, red-brown/brass buttons
- Vth Corps:** 4th Regt (Hoch-und-Deutschmeister), sky-blue/brass buttons.

Austrian Jaeger Regiments wore pike-grey (blue-grey) tunics and trousers, with medium green piping and collars, cuffs, etc. The black hat had a 'fountain' of green capercaillie feathers fixed on the left side with a brass holder. Buttons and metal numerals were brass, except for the Territorial Rifle Regiments and Reserve Regiment No 4, which had brass buttons and an aluminium 'Edelweiss' on the collar; feathers were black and white mixed. All light infantry wore black equipment with brass fittings.

All Austrian officers wore yellow sashes from right shoulder to left hip, usually, but not always, edged in black. General officers had gold in place of yellow. Swords were carried at the left hip; pistols were optional.

Musicians wore only the sword belt of the crossbelt. The 'swallowests' were in regimental colours, laced in white, and the

collar was edged in white tape on bottom and front edges. Drums were brass cased with hoops painted with diagonal black-red-yellow stripes.

The Saxon Army followed Austrian styles, but the Infantry tunic was sky-blue, as were the trousers. Tunic front and bottom, pocket flaps, collar, cuffs and shoulder straps were piped scarlet. For the Bohemian campaign, peaked sky-blue field caps were worn, and the short black boots were worn outside the red-seamed trousers. Brigade colours were worn on cuffs, collar and cap-band:

- 1st Brigade:** red
2nd Brigade: yellow
3rd Brigade: black
4th (Life) Brigade: white

Each brigade had four battalions, and one Jaeger battalion. The Jaegers wore dark-green in place of sky-blue: the red piping as before, and field-caps, collar, cuffs and cap-band were black.

Buttons for all infantry were brass; similarly all equipment was black, as were packs and pouches. All covered blanket-rolls were white canvas. Cockades were white, centred green.

Musicians wore white drum-slugs where appropriate; epaulettes were worn instead of the customary 'swallow nests', with yellow-metal half-moons (Infantry had sky-blue centres and red fringes, Light Infantry black centres and fringes). Drums were cased in brass and the loops were striped green and white, diagonally. (Austrian and Saxon Infantry are shown in the drawing below).

Hannover followed Prussian fashions until 1862, then adopted the Austrian covered shako. The Prussian-style tunic

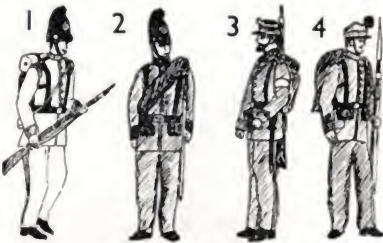


Key to figures: (1) AUSTRIA: German Infantry. (2) AUSTRIA: Hungarian Infantry. (3) AUSTRIA: Jaeger. (4) SAXONY: Infantry. (5) SAXONY: Light Infantry drummer.

was dark blue with red collar, cuffs, and piping. 'Litzen' on collar and cuffs was white for the Guard Regiment, yellow for the 7 others. The grey trousers, piped red, were tucked into tan gaiters, above black ankle-boots. Equipment was white, blankets grey, packs natural hide. The Light Infantry were similar except for dark green tunics with black collar, cuffs and shoulder straps. Guard Jaegers had red piping on all black 'facings'.

Buttons were silver for Guard and Light Infantry, brass for others. Light Infantry wore a black hanging plume, and black equipment.

Saxe-Meiningen wore an Austrian-style uniform: dark green tunic with black facings, piped red, with black tape across the chest. Trousers were grey, piped red. Shakos were Austrian with brass crest in



Key to figures: (1) BAVARIA: Infantry. (2) SCHAUMBURG-LIPPE: Infantry. (3) OLDENBURG: Infantry. (4) MECKLENBURG: Infantry.

front and black plume: equipment was black leather. Officers wore a similar uniform, piped black instead of red, and with 'hussar' braiding. The sash was silver with green stitching. Cockades were green centred white.

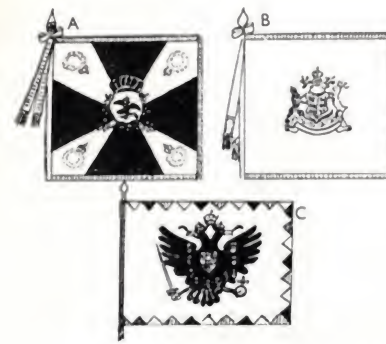
Nassau Infantry wore dark-green double-breasted tunics, piped red. Collar and cuffs were black, piped red; shoulder straps were also red. Trousers were grey, piped red, with equipment white, blanket grey, pack natural hide. Buttons were



Key to figures: (1) HANNOVER: Infantry. (2) SAXE-MEININGEN: Officer. (3) NASSAU: Infantry. (4) WURTEMBERG: Infantry.

brass and the black shako had a black plume and a waterproof cover. Schuetzen detachments wore yellow piping on their shoulder straps. Jaegers wore a black uniform with silver buttons; the tunic was similar to that of the Saxe-Meiningen officers, and equipment was black. Officers wore orange sashes, Infantry as for the

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Right: Austrian general — showing the traditional white tunic.



Left: Examples of infantry colours, keyed to references in text. Heading picture shows Austrian colour (C) with standard bearer and bugler, and a typical Prussian colour, as described in text.

collar were red. Cuffs and buttons were regimental distinctions, eg, the Life Regiment had red cuffs and silver buttons (also two horizontal white litzen stripes on the cuff). Jaeger battalions were similarly clad; collars were red, but 'wings' green. Equipment was black, and blanket covers white.

Schaumburg-Lippe followed Bavarian fashion, but the tunic was dark green with black facings and red piping; trousers were grey with a red stripe. Blanket was grey, webbing was black and fittings and buttons were brass. The helmet emblem was silver.

Mecklenburg and Oldenburg

The Russian Army in 1865 adopted a soft kepi, and the armies of Mecklenburg and Oldenburg adopted a similar type of headwear. Tunics were dark blue with red piping and facings. Trousers were grey with red piping. Blankets were grey, webbing black and packs were natural hide. Brass buttons were worn for Oldenburg, and silver for Mecklenburg. The plume of

the Mecklenburg kepi was black, with the broad lower band red. Most of the 'Austrian', 'Bavarian' and 'Russian' style soldiers can be modelled from the Airfix Union and Confederate Infantry, particularly the 'Russian' styles, who need almost no alteration. Crests and plumes can be made of cement-soaked cotton wool, with blankets out of Plasticine (sealed with Banana Oil) and packs and pouches from scrap plastic.

Infantry Colours

To describe German infantry colours regiment by regiment would require a series of articles in itself. The drawings show the three main types, Type 'A' being the variety favoured by Prussia, Hesse, Baden, Oldenburg and Bavaria. Prussia had a black cross on a white field, with gold emblems (the fringe shown does not apply to Prussia). Hesse used red on white, Baden red on yellow, Oldenburg red on blue, Bavaria white on light blue. The emblems varied from state to state. Type 'B' is the one-colour type used by some Prussian regiments (eg, 3rd Foot Guards, white, 1st (Line) Grenadier Regt, black). The actual example shown is that of the 2nd Wurttemberg Infantry Regt and is scarlet, with yellow/black crest and silver-blue fringe. Type 'C' is the Austrian infantry standard, yellow with a black/red/white triangle edging; the eagle is black and gold and the crests varied by regiment.

Military Modelling—continued

Two limitations now have to be accepted. One is the shape in front, which should be angled somewhat differently but cannot be altered in the model without a complete reconstruction. There-

Top to bottom: The Sd Kfz 263 (less its aerial) and Sd Kfz 233 models before painting. Note extra hatches and modified front and rear hull corners, also the sloping engine decking. Completed model of Sd Kfz 233. Completed model of Sd Kfz 263 Funk wagen.



fore I went for creating the right effect rather than the correct dimensions and angles: the front corners were simply filed off at an angle, giving a reasonable illusion of accuracy, from the normal viewpoint at least. Rear corners need the same treatment and I have shaded the areas at front and rear, in the first model picture.

Wheels are the other big problem, as these should be slightly smaller diameter than those provided in the kit, and finding eight smaller wheels could be difficult. Then you would have to lower all the axles to compensate for the reduced diameter. The easy way out is simply to slice 2 mm from the top of each wheel and then fix them rigidly to the axles. With the mudguards in place, the finished appearance is not at all odd. The secret, in fact, is having the mudguards at the correct level relative to the angled hull top.

The Sd Kfz 263 radio/command vehicle was mechanically similar to the 233, and was built on the same basic hull. It was distinguished by the impressive 'bedstead' aerial array and its lack of an offensive weapon, which was suppressed to provide room for wireless equipment, map tables and seats for radio operators, a force commander and his staff officer. Construction—where relevant—follows the lines of the 233. Templates are given for the hull sides (C and D) and aerial, but you will also need to cut out a roof, and front and rear superstructure faces after the sides have been added. There should be a 6 mm x 5 mm roof hatch and a periscope, while an access door on the rear face should measure 10 mm x 5 mm. The aerial can be made up from wire, either glued or soldered, and curved slightly from end to end. Wire supports, 9 mm high in front and 11 mm at the rear, are also required and the completed array should be adjusted so that its highest point is 38 mm from the ground.

Small details applicable to both the 233 and 263 are spare wheels to disguise the absence of a rear grille, locker doors (2 mm wide) on the mudguards, visors, and small diamond-shaped hatches (6 mm long, 3 mm wide) intended for the disposal of empty shell cases. Finally, the hull doors should be scored vertically to represent two flaps, and the upper hinges can be filed off.



Above: Resplendent in pre-war SR finish is 'R1' class 0-4-4T No 1669 which, in model form, makes a further conversion subject from the Triang M7 chassis and ex-Dublo 0-6-0T plastic body.

'R1' Class 0-4-4T

IN relation to the size of its locomotive stock the Southern Railway had a tremendous variety of locomotives. This variety was in the main a legacy of pre-amalgamation days so that the three main constituents, LSWR, LB & SCR and SE & CR, each contributed their own distinctive styles and designs. The SE & CR was in turn the product of an earlier amalgamation, or rather joint operation, since its two constituents, the South Eastern Railway and the London Chatham and Dover Railway combined forces in 1899.

One of the anomalies of these amalgamations was the fact that the Southern Railway and the South Eastern and Chatham Railway before it, both had two distinctly different locomotive classes with the same type designations 'R' and 'R1'. There was the former South Eastern Railway 'R' Class 0-6-0 tank locomotive dating from 1888, some of which were rebuilt to 'R1' from 1910 onwards. This is the type represented by the Hornby-Dublo/Wrenn model 0-6-0T as used in last month's 'H' Class 0-4-4T conversion. The other 'R1' Class was an 0-4-4T built by Wainwright in 1900 in SE & CR days but developed from the LC & DR 'R' Class 0-4-4T built by Kirtley in 1891.

In appearance the 'R' and 'R1' 0-4-4T Classes looked very much alike, especially when in later years surviving members of both classes were rebuilt with 'H' Class boilers. The main recognition feature is the smaller size bogie wheels of the 'R' Class; 3 ft diameter compared to the 3½ ft of the 'R1' Class. Eighteen members of the 'R' Class were built in 1891, originally numbered 199-216, re-numbered 658-675 in SE & CR days and numbered 1658-1675 in Southern Railway days. All but three, 1664/8/9, survived until nationalisation when all the remainder except 1672/3 were re-numbered 31658-31675. 31666 was the last of the class withdrawn in December 1955. The 'R1' Class numbered 15 locomotives. The SE & CR numbers were 696-710, 1000, and later 30000, were added to the surviving numbers in SR and BR days. Two members of the class were withdrawn early, in 1929, but all the remaining 13 survived until nationalisation. The last of the Class was 31704 which was withdrawn

in 1956.

Although the 'R' and 'R1' Classes had a similar line of descent to the 'H' Class and in fact they both latterly shared the same design boiler, they were quite different in external appearance. They appeared to be much squatter, due largely to the cut down chimney and lower cab roof without the distinctive pagoda shape of the 'H' Class. Another prominent difference is that unlike the 'H' Class, the 'R' and 'R1' engines had the sandbox above the footplate combined with the front splashers.

Once again the Hornby-Dublo/Wrenn 'R1' 0-6-0T locomotive body and the Triang M7 chassis were used in this conversion. The conversion is in fact very similar to the 'H' Class described last month and I would refer readers to that issue for all detailed work concerning the chassis and the method of fitting the chassis to the body. Briefly, I would mention that it is necessary to fit smaller diameter coupled wheels, make some slight amendments to the front end of the chassis block, reduce the rear bogie wheelbase and shorten the rear chassis extension piece. It is also preferable to fit scale bogie wheels as the Triang bogie wheels are really too small for the 'H' and 'R1' and too large for the 'R'.

So far as the body is concerned, one can spend as much time as one has available adding numerous detail parts but a fairly representative model of the 'R' and 'R1' Class can, however, be made simply by removing the flaring on the top of the side tanks and bunker sides, extending

Below: The completed model seen in the dirty black post-war SR finish devoid of lining. Note screw couplings, with brake pipes yet to be fitted.



BY NORMAN SIMMONS

the rear bunker, removing the pagoda roof and fitting a new lower roof and reducing the height of the chimney. We are spared perhaps the trickiest part of the 'H' Class conversion, removing and filling in the gap left by the combined sandboxes and splashers. There is, however, one amendment required at this point: that is the removal of the beading around the edge of the splashers which was a feature of the 'R1' 0-6-0T and which is nicely moulded on the Hornby-Dublo/Wrenn body. The splashers beading is, of course, a simple feature to remove using a sharp craft knife, scraper, file and fine emery paper.

Another worthwhile modification is to remove the boiler feed pipes moulded on the Hornby 'R1' body and which on the 'R1' turn upwards and back into the top forward edges of the side tanks. On the 0-4-4Ts these pipes come down vertically and bend outwards outside the splashers to become very prominent features. Some of Slater's plastic rodding would be ideal for this, although a length of copper wire would look very nice, especially if it was left unpainted. The plastic handrails are, of course, better replaced by wire and split pins.

The coal bunker was extended by inserting an 8.5 mm spacer of 60 thou plastic card between the existing bunker severed from the body by a saw cut immediately behind the cab. 20 thou plastic card 16.5 x 14 mm was cemented

across the back of the spacer inside the body, stretching from the rib inside the cab by the door opening to the inside corner of the bunker. A piece of 20 thou plastic card approximately 16 x 25 mm was cemented in place as a floor to the bunker. The floor height should be immediately above the slot in the bunker back panel. I have given approximate dimensions as the most important part is to make the floor a force fit inside the bunker. Furthermore, it is most important to cut the floor exactly rectangular since this will determine the line-up of the bunker with the rest of the body.

The force fit floor wedges the backing piece to the spacer up against the sides and holds the assembly square while the cement is drying. It is possible to put an elastic band around the assembly which will hold in tight the joints either side of the spacer so that perfect bonding takes place. A further aid is to wedge in a lower extension to the cab rear which can be a piece of 20 thou plastic card approximately 25 x 17 mm, but once again make sure this is going to be a force fit before cutting out. With the assembly held in place a liberal coat of liquid cement will ensure the joints weld together and the result should be a strong and rigid assembly. When dry this can be filed, scraped and smoothed down so that



the joints either side of the spacer are completely invisible. If an extra piece of 60 thou plastic card is cemented in place in the gap between the footplate edges even the 'lip' to the top edge of the footplate can be carried through along the spacer by judicious filing and scraping. Surprisingly, the join in my 'H' Class body was completely invisible after just one coat of paint, and I have difficulty in finding it now even though I know where it is.

I used a saw blade as well as a craft knife to remove the pagoda roof and lower the roof line. An alternative method might have been to drill a series of holes into the roof, working from inside the cab, and to cut out the roof to leave the sides which could then be cut-down in height quite easily. I only tried one way, so I wouldn't know, but either way it is not a particularly hazardous operation. Approximately 1.5 mm is the height by which I lowered the roof, which brings the cab side down to just above the side opening. A new roof was formed from 10 thou plastic card and rain strips were cemented with liquid cement along the edge. I have no accurate information regarding the chimney height but a

July, 1970



Above: Three close-up views show bunker and cab changes, reduced chimney and added handrails, and a rear view of the altered cab and bunker. Left: Complete model prior to painting with plastic card parts in white.

reduction of about 1.5 mm looks about right. Luckily the coal rails on the prototype are backed with a plate behind so that it is only necessary to cement strips to the backing plate and there is no need to fret out the spaces in between. The coal rails are approximately 4 mm high and there are three equally spaced rails running horizontally.

Another modification which can be made to this conversion as well as to the 'H' Class conversion last month is to remove the bulges on the top of the firebox which appear on the Hornby model but not on the prototype. These bulges were obviously fitted to the Hornby model to clear the electric motor but they are not required on this conversion using the Triang M7 chassis. I cemented odd pieces of plastic card inside the bulges at the same time as I filled in the elongated cab front window holes. When the cement was dry the bulges were carefully carved away and the joins smoothed over. New circular windows were drilled out at the same height as the existing oval ones.

As in the 'H' Class conversion the length of the footplate forward of the smokebox ought really to be reduced in length by approximately 3 mm and the decision is yours whether you wish to do this. I have resisted this so far fearing that there would be little room to fit the forward fixing screw but I must admit this departure from prototype is beginning to jar on the model. I think it would

just be possible to take off another 1.5 mm from the front end of the chassis without opening out or weakening the forward fixing bolt hole. This would probably just about leave room for the buffer beam if the buffer beam was brought 3 mm further back. I haven't tried it yet, so I cannot say for sure.

As mentioned earlier, a large majority of the 'R' and 'R1' Classes survived to be nationalised and they were familiar sights on branch line passenger duties in Kent for many years. Most of the 'R' and a good half of the 'R1' Class were fitted with motor train fittings in the latter years of their lives. As a consequence they received BR lined black livery and before that in Southern Railway days, of course, they had the attractive lined green Southern livery, as the photograph of 'R' Class 1669 shows. There is a Skinley drawing No 323 of the 'R' Class fitted with the original boiler and condensing apparatus which both classes carried when built. The pitch of the boiler is nearer that of the Hornby-Dublo/Wrenn 'R1' 0-6-0T and is more correct than the 'H' Class boiler which was fitted some 7½ inches higher in the frames. To make such an alteration would not be impossible but I would submit it would not be easy and if you are going to this trouble I think you might as well start from scratch. Certainly the Hornby-Dublo/Wrenn conversion looks convincing in the flesh and I consider this counts for a lot, even if it is not accurate to the precise number of inches.

HMS VICTORY

LATEST news for sailing ship modelling enthusiasts is that Patrick Stephens Ltd, in conjunction with Airfix Products Ltd, is to publish a new series of books devoted to specific ships in the Airfix 'Classic Ships' range. Under the generic title *Classic Ships and How to Model Them* each book will deal with one ship, and the first title, out this July, is *HMS Victory*. Author is Noel Hackney, remembered for his detailed 'Sailplan' series presented last year in *Airfix Magazine*. The books have very attractive coloured covers and are devoted to both the history of the ship and exhaustive modelling notes. History of the actual ship is dealt with at length first, together with a general description and this is illustrated from contemporary sources as well as with pictures of the ship as she is now preserved at Portsmouth. All the famous battles in *Victory's* long fighting career are covered. The rest of the book is devoted to an almost plank-by-plank description of modelling and super-detailing *Victory* from the Airfix kit. Though the kit itself is highly detailed, its rig is somewhat simplified. This book shows how to put it into the 'showpiece' class and chapters cover armament, sails, rigging, detailing, masts, etc. Priced at 21s and copiously illustrated with pictures and drawings this publication should appeal to all ship modellers. It will be available from bookshops, main model shops or direct from the publishers at 9 Ely Place, London, EC1. Second book in the series will feature *Mayflower*, subject of a forthcoming Airfix model.

THE RAF'S CHIPMUNK

Its history and markings

It is hard to realise that the Chipmunk in Royal Air Force hands is about to come of age. Unsung it has provided elementary training in varying measure since February 4, 1950, when the first examples reached Oxford University Air Squadron. Already it has served as an elementary trainer for longer than the Tiger Moth, and is rapidly creeping up on the Avro 504's record. Thus the latest Airfix release is timely.

The Chipmunk was de Havilland Canada's first design. For DH it represented part of the break away into metal aeroplanes. But it retained the hallmark of all that great company's designs, simple elegance. And as if to stamp home the company's form it featured yet again the shapely DH tail and a de Havilland engine.

It was at White Waltham on April 27, 1947, that the natural finish prototype CF-DIO-X made its public debut in Britain. Amongst rather aged looking light aeroplanes the shining newcomer looked a winner. Its metal finish was fine, nicely set off by a rich green cheat line, green anti-dazzle panel and green letters outlined cream.

Trials with this machine showed it to be the ideal Tiger Moth replacement for the Reserve Flying Training Schools and University Air Squadrons and such regular training units as would need it. It was ordered to be built in Britain in quantity for the RAF, orders being six times repeated until 735 had been built. Serial numbers allocated to these machines were WB549-588, WB600-635, WB638-662, WB665-706, WB709-739, WB743-768, WD282-310, WD318-338, WD344-365, WD370-397, WG271-289, WG299-336, WG348-364, WG392-432, WG457-491, WK506-523, WK547-591, WK607-643, WP772-811, WP828-872, WP898-930, WP962-988, WZ845-884.

Oxford University Air Squadron received its eight aircraft WB554-561 (coded RUO-A to H) after the first machines had been used for trials. Of these WB549-550 underwent acceptance trials at A and AEE, WB551 was used by CFS, and the servicing manuals were prepared at Wattisham using WB553.

Second principal recipient was Cambridge University Air Squadron. Its first four aircraft arrived at Cambridge on February 17, 1950, and were WB562-564. Like their predecessors they had silver finish with the then customary yellow rear fuselage and wing 'T-bands'. Fuselage and underwing serials and the anti-dazzle panel were black. Within 24-hours the Squadron had applied the Cambridge University crest to the cowl side panels. A week later the unit's codes were in place, comprising the letters RUC in black forward of the roundel on the port side, aft on the starboard. The eight aircraft ultimately supplied, WB562-569 were consecutively lettered A to H, by which time the spinners were of turquoise shade. In the wintry weather it was possible now to fly when gusty conditions would have kept the Tigers grounded.

Next to equip was the Reserve Command Instrument Training Flight at Honiley, then came the turn of No 22 Reserve Flying School at Cambridge. Fifteen Chipmunks replaced its Tiger Moths in February and March, 1950. These machines WB573-585, 588 and WB600 were soon to be seen coded RCU-J to Z, again consecutively. They had red spinners to make identification easier.

Thereafter deliveries of small batches were made, to Edinburgh University Air Squadron, eg WB601:RUE-E, to London University Air Squadron, eg WB604:RUL-A, and to 18 RFS Fair Oaks, eg WB613:RCT-R. Then came No 1 RFS at Panshanger, eg, WB643:RCM-U. As yet the positions of the codes had been as on the CUAS



WP911 one of the first Chipmunks with dayglo. It has dayglo wing tips and rear fuselage band. Photographed by G. Nelson in May, 1958.



Above, top to bottom: WB568:RUC-G of the Cambridge University Air Squadron in February, 1950. WB640:31 of one of the Reserve Flying Schools, after the removal of code letters in 1951. WK574 with the Cambridge UAS stripe and yellow 'T-bands', May, 1959.



machines, but No 1 RFS chose to place the unit letters ahead of the roundels and put the individual letter on the cowl, still in black. WB703:RUY-D of Leeds University Air Squadron featured the more usual style of coding. In each case these black letters were 12 inches high, fuselage roundels were of 18 inches diameter and yellow fuselage and wing bands were two feet wide. When WB723 appeared at the 1950 SBAC Show it wore the basic paint scheme of all production aircraft. Other RFS aircraft now included WB675:RCY-H of 5 RFS Barton and WB696:RCR-C of 11 RFS Scone.

In 1951 code letters were removed from many RAF aircraft. They had been an emergency and wartime measure. In the peace time air force more emphasis was to be given to colours as a means of identity. At the same time the removal of codes offered a means of not revealing the aircraft's unit identity.

Soon the Chipmunks forsook their code letters, for two-digit numbers, on the RFS machines at least. WB577 of 22 RFS had '14' painted in black ahead of the fuselage roundels, WB580 was '17' and WB581 became '18'.

Already the University Air Squadrons had adopted another new means of identity. About January 10, 1951, Cambridge introduced a stripe extending aft from the rear of the cowl in Cambridge Blue, with dark blue and red stripes running lengthwise. At this time the codes RUC were still in use, as on WB564:RUC-C which had the new identity by January 14. This was short-lived, for when in the late Spring codes were dispensed with the individual letter remained in black ahead of the fuselage roundel. The Cambridge University crest was usually to be seen on the cowl sides, as before.

There were variations in the new general system. WD331 of 23 RFS Usworth bore the lettering R20. London UAS adopted the more usual new style for regular air force trainers, a single letter to denote unit and squadron and another letter to identify the aircraft-in-squadron. Thus WB606 once RUL-B became I2-1 and later WB624 became L-K the letters reading thus on both sides of the aircraft.

For the next few years, until they closed, the RFSs nearly all had

just an individual number to identify their aircraft, eg, WB622:16 of 18 RFS (ex RCT-P) and WB652:16 of 25 RFS (ex RCM-L). Some of the University Air Squadrons also opted for plain numbers, RUY-D of Leeds UAS becoming '53'. Durham UAS had its aircraft unit coded U, WD329 being U-D and WD330 U-B. This was succeeded by an individual letter forward and a light blue cheat line, as on WD333:R. The U coding was also used by Liverpool UAS as on WD351:U-A in 1953. At that time Chipmunks were in use at Cranwell, WK568 with DT aft in black and the Cranwell crest on its cowl appearing at the 1953 Royal Review. Similar markings to these were in vogue for some years, as evidenced by WK635 with D ahead of the roundel and a red cheat line. From Nottingham UAS, it had a red Robin Hood motif on its fin tip.

By 1957 a new type of identity had been introduced to the UAS Chipmunks in many cases. This consisted of a square or rectangle featuring the respective University colours. Usually it was applied to the cowl sides or placed just aft of the cowl. Aberdeen favoured a yellow square bearing five smaller squares, as on WD371. Leeds opted for a square with two green and two brown segments. Liverpool had three stripes on the cowl reading, from top to bottom, blue, white and black. The rectangle had a narrow yellow outline. Later it adopted a square bearing the same colours. Manchester had a hollow square two corners of which were blue and the others green. London, on the other hand, emulated fighter squadron markings with black stripes flanking the fuselage roundel. Southampton chose a blue band extending from the spinner to the yellow T-band. On some machines codes and colours were carried; thus WD375 wore the Liverpool stripes on the nose and U-E coding. WK553 of Glasgow UAS had the University square colours and '49' ahead of the roundel in black, with the unit crest on the cowl.

Hardly was the paint dry on these new trimmings when dayglo, the next major innovation in trainer paint schemes, was introduced. At first it was used sparingly. One of the first machines to have it was WP911, which had the orange shade applied to the wing tips and tailplane tips only, whilst the yellow T-bands were retained, as was the black and orange Glasgow UAS square.

At first the new trim was added in an individual style, and at a slow pace. During 1958 some trainers had very rich yellow T-bands applied—almost a sort of dayglo. WB627 was seen wearing them on September 20, 1958, and this also had yellow wing tips. WG362 wore them and had yellow and blue fin checks.

It was 1959 that the intended dayglo finish really made its dazzling appearance. In the case of Cambridge UAS it was June, 1959, when the Chipmunks appeared in their gay decor. Their cowlings had the new vivid orange shade, also their rear fuselages, fins, flaps, wing tips and parts of the tailplane. At this time the yellow wing bands—partly over-painted—still survived. Still the new scheme was slow to appear, but WD305:L of the Cambridge UAS had it, plus the usual



Top: WP922 had university air squadron markings on the forward fuselage. The cowl, wings and tail unit had dayglo areas. Above: Dayglo nose, rear fuselage, fin, tailplane and wings on WD379:K of the Cambridge UAS.



Top to bottom: WP781 of Nottingham UAS with a red fuselage stripe, serial of reduced size, stripes as fitted to later Chipmunks (and as a retrospective modification), and strip dayglo. Photographed in September, 1966. WD379 in the usual form of strip dayglo. WZ879 with Cranwell band and strip dayglo. Modified for glider towing it was photographed in September, 1963. WG323:F with ARMY marking. It has 'solid' areas of dayglo. Civilianised Chipmunk G-AOTM with clear vision canopy and spats.

fuselage stripe. In September WK638 could be seen in a similar dayglo scheme, and with dark blue fuselage stripe. An eight inch 'B' was painted on the fin tip and the Oxford UAS crest was on the nose and on a black base.

By this time there were many local variations of dayglo trim and soon the yellow 'T-bands' introduced in 1947 were a memory. In the 1960s the current strip dayglo form began to appear in its tape form, and of a red hue. This brought the change to stripes of colour on the rear fuselage, cowl, above and below the wing tips and tailplane that is now common. There are many local variations too involved for written description.

Trainer markings were at this stage far from fully evolved. The decision to discard silver finish on RAF aircraft was implemented in 1966 but has been slow to take over completely where trainers are concerned. Some Chipmunks were re-sprayed and quite a few now have the Light Aircraft Grey overall finish. These include WK564:K of the Cambridge UAS which features a black K on the front of the

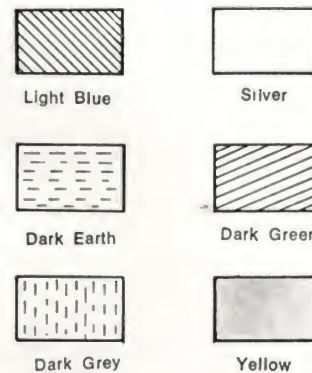
Continued on page 525

CHIPMUNK COLOUR SCHEMES

Compiled by Richard E. Gardner

A: Cambridge UAS Mk T10 in 1964. Overall silver finish; current finish is overall light grey.

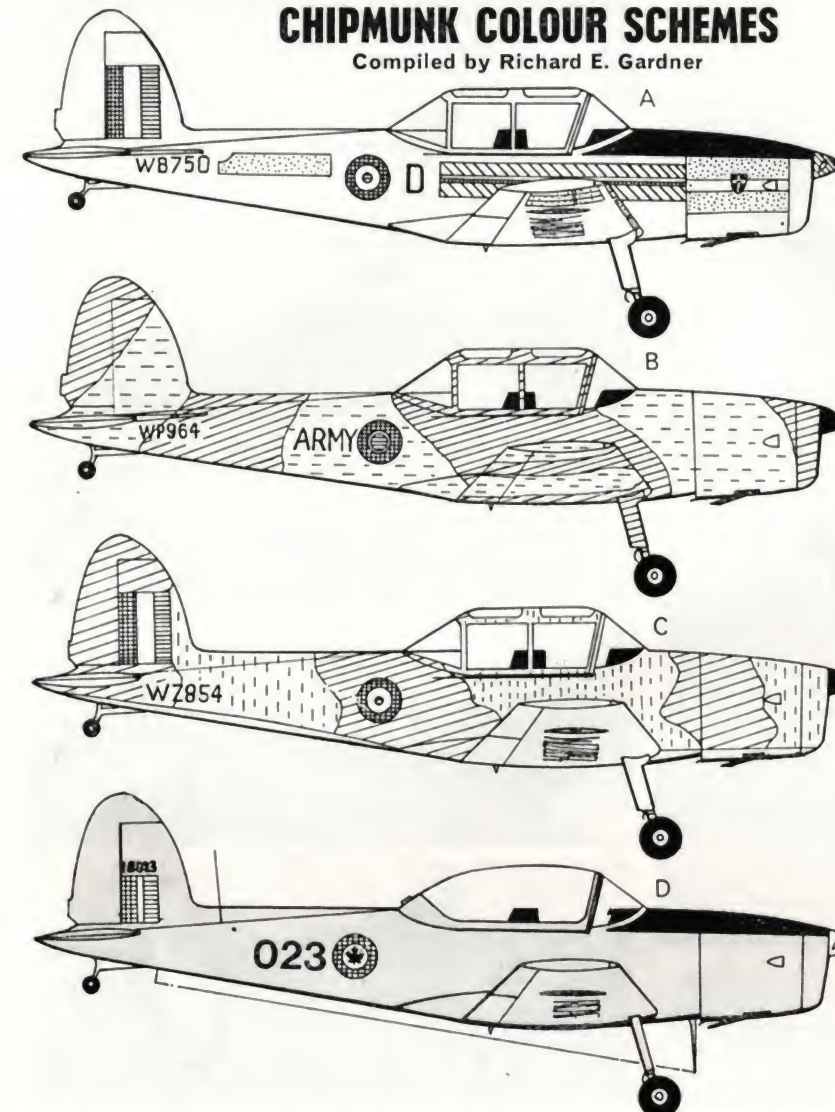
B: WP964 of the Army Aviation Centre, Middle Wallop. Used for Forward Air Control training. 'C' type roundels on fuselage, white 'ARMY' on wing roundels.



C: WZ854 in RAF camouflage with roundels and serials in standard positions.

D: 18023/023 of the RCAF in 1959. Note different oleo legs and extra radio aerials.

Below: Close view of tail markings of the Skylarks' aircraft. Nearest machine is light grey and the second, WK628, is silver with non-standard roundel and different style of serial. Bottom: Detail view of CFS badge and flash with cowling panels open; note Dayglo fire extinguisher badge below CFS badge (Photos by Richard E. Gardner).



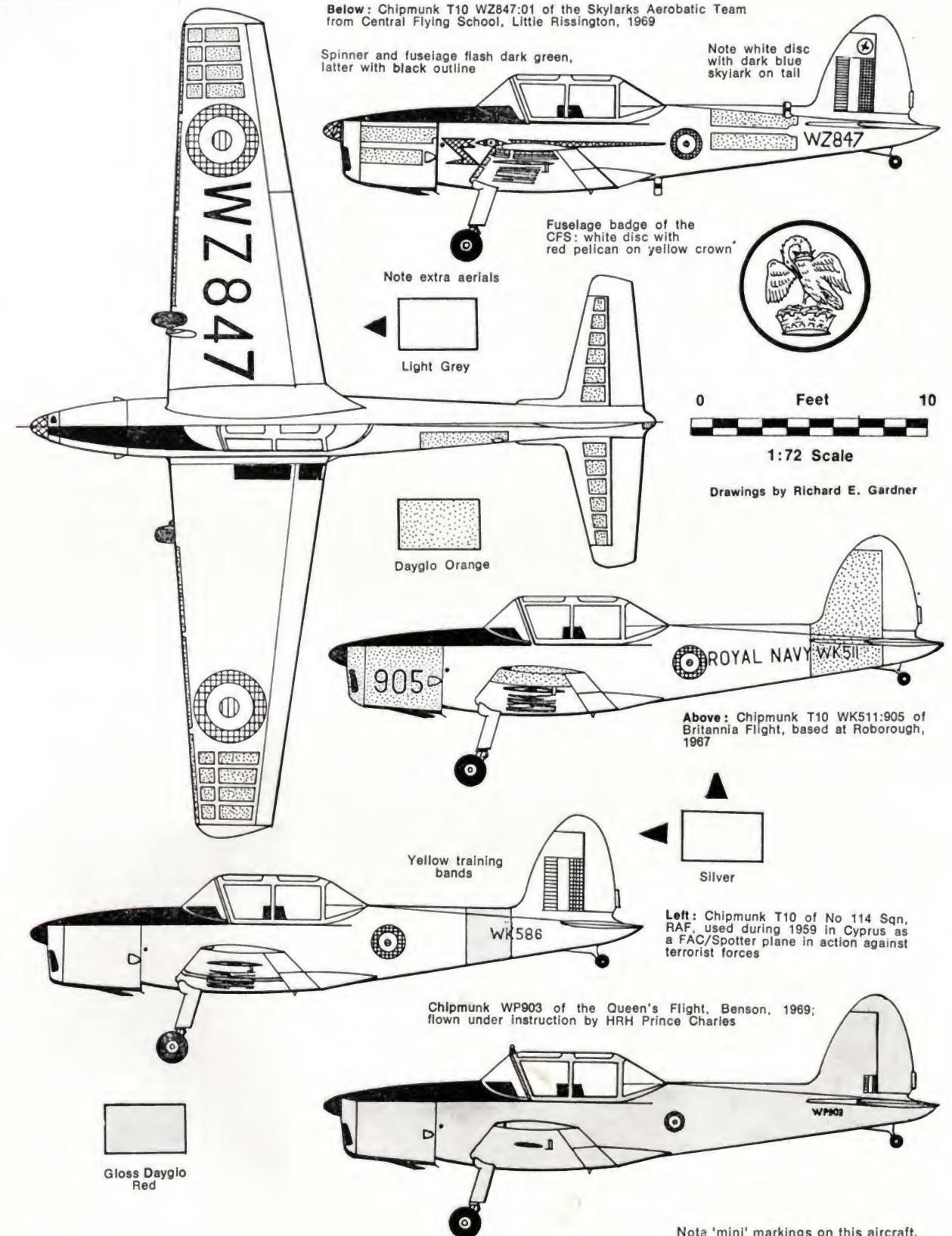
Below: WK574, subject of the Airfix kit markings. It has 4 Dayglo bands on the wing top, 6 on the tailplane, 2 on the cowling, and 2 on the fuselage, and the cowling badge is absent (Photo by B. Goldthorpe). Bottom: Chipmunks of the Danish Air Force. Silver finish with yellow 'T-bands' and black lettering (Photo by J. Skovgard).



Below: Chipmunk T10 WZ847:01 of the Skylarks Aerobatic Team from Central Flying School, Little Rissington, 1969

Spinner and fuselage flash dark green, latter with black outline

Note white disc with dark blue skyark on tail



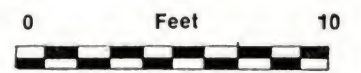
Fuselage badge of the CFS: white disc with red pelican on yellow crown



Note extra aerials



Light Grey

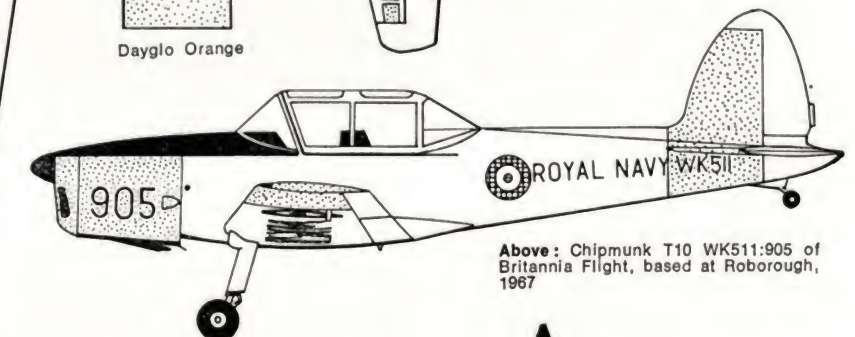


1:72 Scale

Drawings by Richard E. Gardner



Dayglo Orange

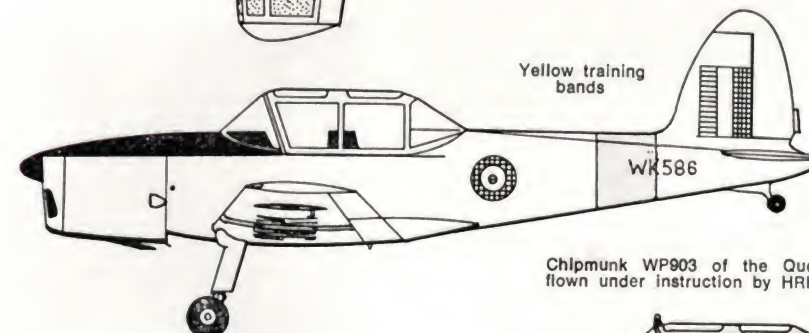


Above: Chipmunk T10 WK511:905 of Britannia Flight, based at Roborough, 1967

Yellow training bands

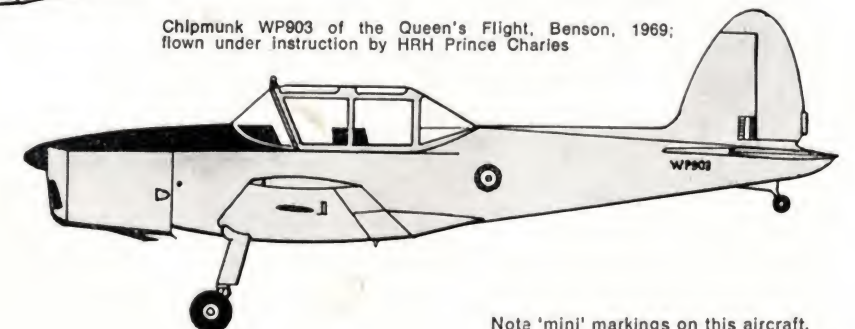


Silver



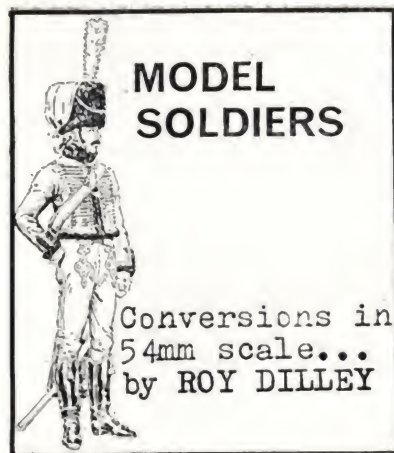
Left: Chipmunk T10 of No 114 Sqn, RAF, used during 1959 in Cyprus as a FAC/Spotter plane in action against terrorist forces

Chipmunk WP903 of the Queen's Flight, Benson, 1969; flown under instruction by HRH Prince Charles



Gloss Dayglo Red

Note 'mini' markings on this aircraft.



HAVING examined in recent issues some of the types of basic figures and accessories available to the model soldier converter, and discussed a number of techniques for utilising them in the creation of new and original items, I have chosen a more ambitious project as the subject for this month's article—a mounted officer of the Camel Corps in the Gordon Relief Expedition of 1884-5.

The political background to the despatch in September 1884 of the relief force to Khartoum, and the tragic circumstance of its arrival too late to rescue General Gordon must be well-known to us all from our schooldays, and need not be gone into here. However, the Expedition itself was of a unique character, particularly the Desert Column, which, mounted on camels except for a small cavalry detachment, made the final dash of nearly 180 miles across the neck of the loop formed by the River Nile in its gigantic detour around the Bayuda Desert north of Khartoum.

This force, only just 1,500 strong, successfully fought two pitched battles against an enemy outnumbering it by odds of at least 4 to 1. In the process, it sustained casualties amounting to 15 per cent of its strength, and including both the force commander Brigadier-

General Sir Herbert Stewart, and Colonel Fred Burnaby, RHG, who was named as his successor. Command devolved on to Colonel Sir Charles Wilson, an officer of the Royal Engineers who had been in charge of Intelligence, and a certain amount of controversy has arisen as to the way in which he conducted subsequent events.

Three Camel Regiments formed the main body of the force, two of them, the Guards and Heavy regiments having been sent out from home together with one company of the Mounted Infantry Camel Corps, the balance of which was made up in Egypt from units stationed there in garrison. A fourth camel regiment, to which nine Hussar units contributed men, was used on Line of Communications duties, and was known as the Light Camel Corps, but it took no part in the Desert Column as such. In composition the regiments were unusual in that they were made up from relatively small detachments from many parent units.

Battalions of the Grenadier, Coldstream, and Scots Guards sent contingents to the Guards Camel Regiment, as did the Royal Marines, who formed No 4 Company. The Heavy Camel Regiment was composed of detachments from the 1st and 2nd Life Guards, Royal Horse Guards, 2nd, 4th and 5th Dragoon Guards, the Royal Dragoons, Royal Scots Greys, the 5th Lancers, and the 16th Lancers. Even more diverse were the units from which the Mounted Infantry Camel Corps drew its personnel. They included the Royal Scots, Duke of Cornwall's Light Infantry, Black Watch, South Staffordshire Regiment, King's Royal Rifle Corps, Royal West Kent Regiment, Connaught Rangers, Essex Regiment, Somerset Light Infantry, Gordon Highlanders, Royal Sussex Regiment, and the Rifle Brigade; that is ten line and two rifle regiments. In fact, all the camel regiments were mounted Infantry in that they fought on foot, the camels being merely for transportation. Detachments of the Royal Artillery, with three 7 pdr 'screw' guns, Royal Engineers, a Naval 'Brigade' with a Gardner machine gun, and a small force of cavalry, 8 officers

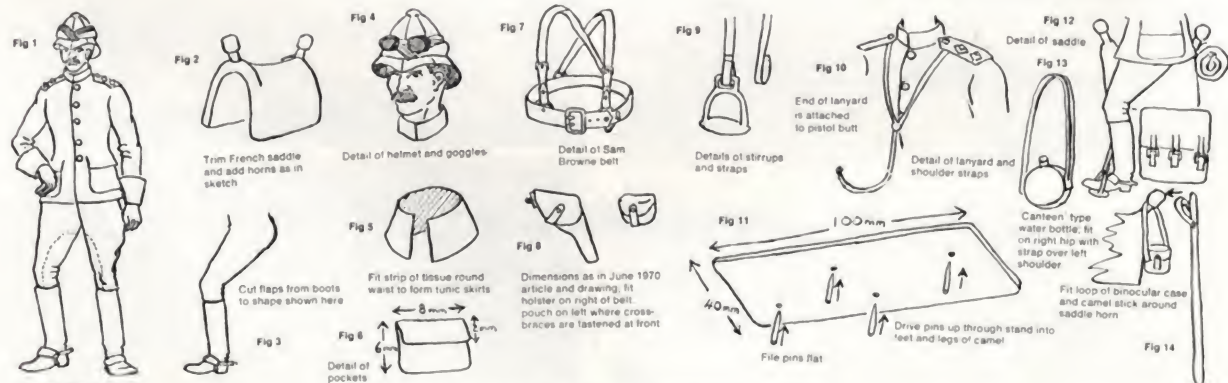
and 127 men of the 19th Hussars mounted on little grey Syrian stallions, completed the column.

The British soldiers, many of whom had been sent straight out from home for the expedition, had, of course, no experience of camels, and viewed their novel means of locomotion with mixed feelings, which the animals, renowned for the uncertainty of their temperament, heartily reciprocated. It was a matter for some wonder that, in a comparatively short space of time the force shook down into a reasonably coherent and efficient whole, although it must be noted that the 'Heavies', who as cavalrymen had been used to the light carbine, never really got the hang of the long infantry rifle and bayonet with which they were armed. This point may well have some bearing on the fact that it was through the 'Heavies' ranks that the enemy burst in their celebrated, albeit extremely short-lived, 'breaking of a British Square', during the Battle of Abu Klea on January 17, 1885. However, the entire force behaved with great bravery, staunchness and spirit, and it is upon other shoulders that the blame for the Expedition failing to achieve its object must be laid.

The model represents an officer of the Life Guards, serving in the Heavy Camel regiment. He is wearing one of the first versions of 'service dress' specifically designed as such (Fig 1).

COLOUR DETAILS

Helmet and pugaree: Buff.
Goggles: Black semi-matt, with blue lenses and grey strap.
Tunic: Pale grey.
Breeches: Light Khaki.
Belts and boots: Brown semi-gloss.
Holster and pouch: Brown semi-gloss.
Valises and binocular case: Brown semi-gloss.
Gauntlets: Light brown semi-gloss.
Saddle: Crimson with brown semi-gloss horns.
Rolls caps: Dark Blue, with brown straps.
Camel stick: Greenish-grey.
Saddle girths: Buff, with brown connecting straps.
Camel: Fawn, with reddish-brown long-haired areas.
Guiding-rope: Buff.
Base: Sandy, with light brown lichen 'bushes'.
Canteen Water-bottle: Grey with buff-strap with central brown line.



All sketches are keyed to references in text.

Materials required for the somewhat complex conversion are:

- 1 Britain's Camel (From the Zoo range; this is a Bactrian camel, but can easily be altered slightly to represent the dromedary or Arabian type with which the Camel regiments were equipped).
- 1 pair of Historex rider's legs in plain leather boots.
- 1 Historex body. I used the one over which the cuirass is fitted.
- 1 pair Historex arms—right hand on hip, left hand grasping reins.
- 1 Rose Models head with old style Wolseley helmet.
- 1 Set Historex stirrups.
- 1 Set Historex gauntlet cuffs.
- Various Historex valises and packs.
- 1 Historex French saddle.
- Plasticard, Microstrip and the small strip of Kleenex tissue.
- Scrap plastic from spares box, and plastic card sheet.
- UHU, Mekpak, Araldite, and Unibond adhesives.
- Household pins.
- Plastic putty or filler.

Carry out the various steps in the conversion as described below.

Trim all flash marks and ridges from the camel, and carefully cut the back to a single humped configuration, filling in the gap between the existing humps with plastic putty, having first driven in some short pins to act as keys for the filler. This technique was described in a previous article on flexible types of figures. Leave the putty to set completely firm; this may take a full 24 hours, but it is essential in order to provide a sound base for the saddle and rider. Now clean up the French saddle and fit saddle horns to the correct angle (Fig 2); these can be made from odd scraps of plastic sprue, cemented into holes drilled in the saddle.



Pictures on this page show right and left views of the completed figure. Note how the valises are carried on the saddle.

Next, cut off the flaps from the boots of the Historex rider's legs to the shape of ordinary riding boots and join the legs together with Mekpak (or similar liquid cement), making sure they fit correctly on to the saddle by judicious trimming (Fig 3). Drill a hole in the neck of the rider's body to receive the peg of the metal head; clean up the metal head and cement it to the body with Araldite or UHU. Now join the body to the legs, and let the whole assembly set thoroughly. As I have explained in previous articles, the head should be turned slightly one way or the other in order to impart more life to the figure. At this stage also fashion a pair of sand-goggles from scrap plastic and fix them to the front of the helmet with Araldite or UHU (Fig 4).

Next, cement the body and leg assembly into the saddle, using Mekpak adhesive, and making certain that a natural stance is achieved, with the knees tightly pressed against the saddle. Cut a piece of Kleenex tissue to form the tunic skirts, and fix it to the lower body with Mekpak. When it is dry, smear the tissue with plastic solution, made by dissolving scrap plastic in a bottle with Mekpak or similar liquid styrene cement. As this soaks into the Kleenex and dries, it hardens up to form a thin plastic sheet, which can be trimmed and cut to the exact shape required (Fig 5). Rectangles of notepaper, 8 mm x 6 mm, with 2 mm flaps to represent pockets, are now cemented to the tunic skirts, and when dry, again smeared with the plastic solution (Fig 6). Now add a 2 mm strip of .01 inch plastic card round the waist, forming the Sam Browne belt, and fit the two cross-braces from 1 mm strip of the same material. A revolver holster and ammunition pouch should now be fashioned from scrap plastic and attached to the belt in the appropriate positions (Fig 8).

Clean up the arms, and fit them carefully to the body, smoothing down the join lines, and fitting the gauntlet cuffs. Then fix the stirrups to the figure's boots with Mekpak, adding stirrup-straps from thin plastic strip (Fig 9). A lanyard of stretched sprue is now fitted round the figure's neck, and attached to the butt of the pistol: when this is dry cut shoulder straps from thin plastic strip and cement to the shoulders (Fig 10).

Cut a rectangular piece of thick plastic (at least .06 inch) as the stand. This should measure 100 mm x 40 mm. Then fix the camel to the stand with lengths of household pin pushed through the plastic and up into the camel's legs, each foot being further secured with Araldite which should be smeared completely over the whole foot, top and bottom. When this dries it loc's the feet into 'cases' of hardened adhesive. The ends of the pins should be filed flat with the under surface of the stand (Fig 11). When the assembly has set thoroughly, cement the saddle and rider to the camel with Mekpak, and add the saddle girths and



neck band. Valises are then cemented each side of the saddle behind the rider's legs, and a rolled cape or overcoat fitted to the rear saddle horns (Fig 12).

Make a water-bottle from scrap plastic and fit it to the right hip of the figure, with a thin plastic card strap passing over the left shoulder. A binocular case and camel-stick are also fashioned from scrap plastic, and cemented to the front saddle horn on the offside, with straps of plastic strip passing round the horn. Finally, a head rope and halter are made from twisted fuse wire, and fitted with one end attached to the strap under the camel's chin, and the other looped over the rider's left hand. Carry out the usual check that all the necessary steps have been properly completed; then coat the camel only with Unibond. When this is dry, the figure is ready for painting.

As I said at the beginning of the article, this is a more ambitious and complicated conversion than I have previously dealt with in this series, but by using care and attention to detail, and employing all the techniques we have discussed, a very satisfactory result can be obtained. The sketches and photographs should make clear the details which have been described in the text.

Rose Models head with Wolseley helmet can be obtained from Oxford Model Centre, 94 St Clements, Oxford, price 3s 11d, postage extra. The Historex parts can be had from Historex Agents, 3 Castle Street, Dover (SAE for prices).

Heyford

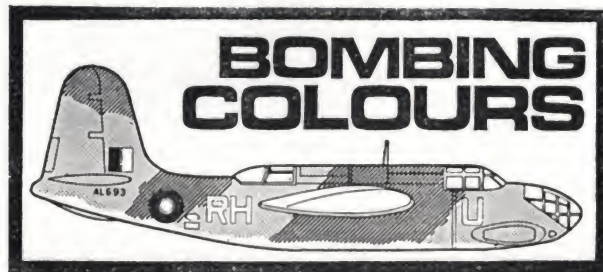
Amendments to the last 'Bombing Colours' article: First, all 'C' flight colours mentioned were blue. Then, K5180 a Mk III with 102 and 149 Sqns was omitted from the listing. Finally, K6900 crashed at Hebden not Hendon.

New Books

Due at the end of July is a revised second edition of *How to Go Plastic Modelling* by Chris Ellis. Fully up-dated, it has a new conversion (for a Tempest II) and listings of latest paints and transfers etc. Out in September is a companion volume *How to Go Advanced Plastic Modelling*, also by Chris Ellis, but with chapters by specialists in various subjects. Coverage includes aircraft, tanks, ships, soldiers, railways with about 24 conversion examples included.



First production Hendon, K5085, poses for its official picture before it entered service with 38 Squadron (MoD photos).



Part 16: Fairey Hendon

THE Fairey Hendon was something of a mystery aircraft. It was the only fully equipped one squadron, No 38, and it was the only heavy bomber to come from Fairey Aviation. As a monoplane heavy bomber, it represented the height of modernity when it made its first flight in November 1931 at which time it was known as the Fairey Night Bomber.

It was the first, and only, service monoplane to be given the dark green Nivo finish, and correspondingly it had the blue and red roundels on fuselage sides and well outboard on the upper and lower surfaces of the wings. The prototype differed by having large wing roundels, overlapping the ailerons, but the production aircraft, produced after the 1934 ruling that national markings should not overlap control surfaces, had smaller wing roundels.

Production was limited to K1695 the prototype and fourteen

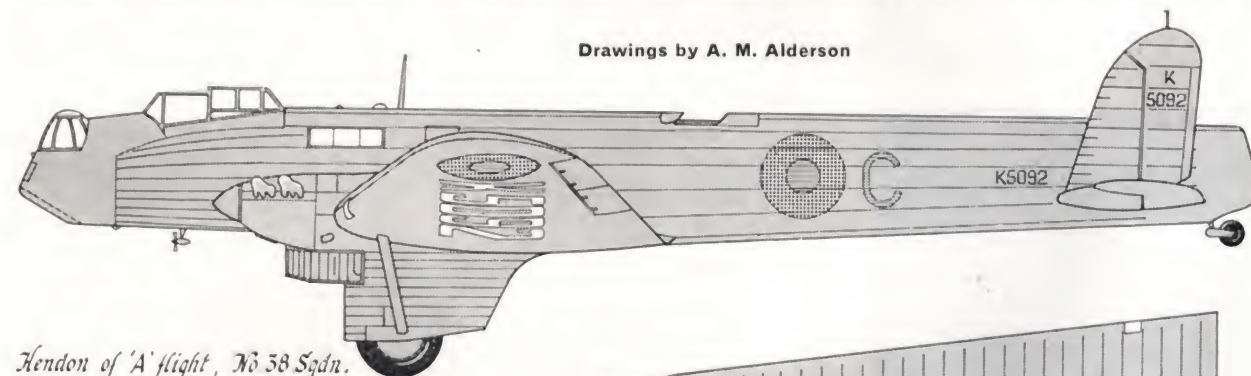
production aircraft, K5085-5098, of which every production aircraft saw service in No 38 Squadron; the first arrived at Mildenhall for the squadron on November 20, 1936. It has been stated that Hendons also equipped No 115 Squadron, which is only partly true. No Hendons were officially allotted to No 115 Squadron, which reformed June 15, 1937, on which date the 'B' Flight Hendons of No 38 Squadron, then stationed at Marham, were loaned to No 115 Squadron, sharing the station, pending the delivery of their Harrows. Within two months they were back as 'B' Flight No 38 Squadron. During these two months no known change was made to markings, not that either squadron was lavish in this respect.

The only squadron marking was an individual letter, in flight colours, officially red, yellow and blue, for 'A', 'B' and 'C' flights respectively and this was restricted to fuselage sides aft of the roundel. The Squadron had three flights of four aircraft with two in reserve. A squadron badge was officially approved in 1937 with the official painting of the crest, 'a heron volant', being presented that August, but there is no record of this being marked on their large gaunt Hendons.

The Hendon was probably the only Nivo-finished aircraft to bear warning markings. On each side of the engines, on the wing leading edges the warning notice 'KEEP CLEAR OF AIRSCREWS' was marked in white.

As with the Heyfords, so with the Hendons, the serial numbers on the rear fuselage in black eight-inch characters tended to become 'lost' against the massive dark green bulk of the aircraft. On the tail, the serial was marked on both sides of both

Drawings by A. M. Alderson



Hendon of 'A' flight, No 38 Sqn.

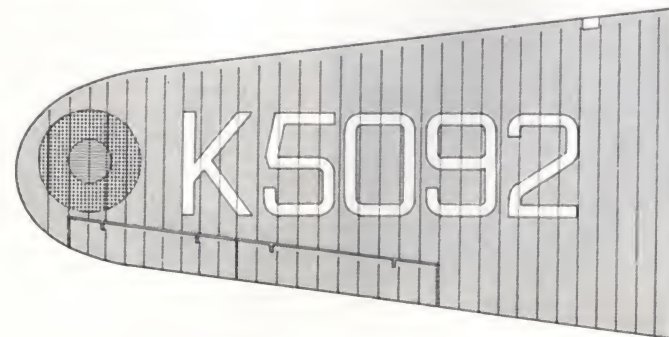


Scale in feet

Colour key



Fuselage and rudder serials black



AIRFIX magazine

rudders. Under the wings the serial was marked large in white, until mid-1938 when it was washed over in green to render it less conspicuous.

Unlike day bombers, Hendons were unaffected by the Munich crisis in the summer of 1938, their dark green camouflage being considered sufficient as camouflage. On November 24, 1938, the first of the No 38 Squadron's Wellingtons, L4230, arrived and by the second week of 1939 the last Hendon had been withdrawn from squadron service.

Although every aircraft was needed at this period of RAF Expansion it was not a practical proposition to keep a single squadron of non-standard aircraft functioning, particularly as their top speed of 150 mph with a 1660 lb bomb load would make them exceedingly vulnerable. An order for a further 60 had been cancelled in favour of more modern aircraft. On investigation, it was decided that these large aircraft, similar in configuration to the Harrows and Whitleys coming into service, could serve usefully at the Electrical and Wireless School, Cranwell, giving trainees practical experience in wiring. After war was declared in September 1939, there was such an intake of trainees that eventually ten Hendons were re-numbered in the instructional airframe series.

With such small numbers of Hendons, space permits a complete individual history of each one:

Serial History

K1695	Prototype delivered to Aircraft and Armament Experimental Establishment May 8, 1932, then to Nos 10 and 9 Squadrons for service trials. No unit markings borne except black No 13 on fuselage side as New Type Park Number at 1932 RAF Display at Hendon. Dispersed in Sept 1938.	Squadron was stored at the Home Aircraft Depot. After a year's service in No 38 Squadron was wrecked in December 1937.
K5091		
K5092	'C' of No 38 Squadron, this aircraft became 1617M at Cranwell.	
K5093	Served in No 38 Squadron, and became 1566M after a short period in No 10 Maintenance Unit.	
K5094	Served in No 38 Squadron from December 1936 to December 1938 when it was scrapped.	
K5095	Served in No 38 Squadron from January 1937 to November 1938 when it was scrapped.	
K5096	Served in No 38 Squadron before becoming 1565M.	
K5097	Served in No 38 Squadron and became 1618M at Cranwell.	
K5098	Served in No 38 Squadron and became 1615M at No 1 Electrical and Wireless School, Cranwell, in August 1939.	
K5099	'K' of No 38 Squadron joined K5088 at Cranwell in August 1939.	
K5090	After service in No 38	

Bruce Robertson

CROSS AND COCKADE

At the recent London meeting of Cross and Cockade (The Society of World War One Aero Historians), a brief talk was given by Air Vice-Marshal A. G. Lee, MC, RAF (Retd) who, as a Lieutenant, Sherwood Foresters, flew Sopwith Pups and Camels with 46 Sqn RFC. He was also kind enough to answer questions posed to him by those members present. The British branch's first 'Quarterly Magazine' was issued in mid April. This features the Bristol F2b and includes an article by the Society's President, Maj W. F. J. Harvey, MBE, DFC, TD, who flew the type with 22 Sqn, RFC, and a comprehensive article on typical Squadron markings for Bristol Fighters by L. A. Rogers. From this issue the magazine will be a regular publication.

Details of membership and of the next London meeting are available from the Membership Secretary, Paul Leaman, 17 Cranleigh Court, Cove, Farnborough, Hants, in exchange for an SAE.

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Top: Prototype Hendon with open cockpits and two-bladed propellers. Fairey Gordons in background. Above: Late service Hendon with revised cockpit cover—at the time this photo was taken the nose gun position cover had been removed. The black fuselage serials are just visible; aircraft is coded 'K'.

Chipmunk—continued from page 519

cowling which many Chipmunks have had over the years. It wears the UAS crest at its fin tip. Another is WK591 in use at Cranwell. This also features the special Cranwell band, light blue bordered on both edges in dark blue and bearing the Cranwell crest on a white base. Its identity number appears in black at the fin tip, as well as just aft of the cowling. The ultimate in Chipmunk markings should be the new grey-red-black trim yet to be reported.

There have, in recent years, been many breakaways from a generally accepted paint scheme on the Chipmunks. One concerns those used by the Army Air Corps at Middle Wallop. WG323 there was one which had the 'solid' orange dayglo nose, tail and wing tips. It also had ARMY in eight inch black letters aft of the roundel and F ahead in black. WP972, also an Army aeroplane, has been wearing strip dayglo. A more striking machine was WZ854 with grey-green-blue camouflage finish.

Additionally the 1960s have seen many civilianised Chipmunks wearing rather sober markings. Thus the choice for the latest Airfix kit is wide. For once there is no need to make extensive conversion to the basic kit—unless you fancy the turbine test bed or the crop sprayer. But for the straightforward modeller a range of post-war RAF trainer markings is easy to portray.

Michael J. F. Bowyer



Two civilianised ex-service Chipmunks. Top: G-AOZV of the Alouette Flying Club, Biggin Hill. This is an ex-College of Air Training machine. It is overall silver with a red/light blue/dark blue stripe. Above: G-APTS of the Surrey and Kent Flying Club. It has a light blue fuselage and wings and yellow tail unit. It has a small rudder and no spinner (Photos by Keith Palmer).

Part 13: Conclusion

As mentioned in the last instalment, during the post-war period some T16 Carriers were retained by the British Army, and these remained in service until the 1950s. A number were used in foreign service and many were converted by an American firm as agricultural or commercial tractors. This conversion was known as the 'SCAT'. These vehicles had various types of superstructures constructed on the original hull.

One experimental vehicle was based on the T16 and was known as **Tugboat**. Projected in late 1944, this equipment was designed to combat anti-personnel mines ('S' mines, 'Schu' mines, etc) which were laid with the normal German anti-tank mines. These anti-personnel mines were intended to prevent the mine clearing teams lifting the anti-tank mines.

The Tugboat consisted of a T16 with additional track and suspension units, sprockets, and idlers fitted to either side of the carrier in order to obtain minimum ground pressure. The vehicle was intended to tow a light mine roller across the minefield to detonate the anti-personnel mines without detonating the tank mines. The unstowed vehicle weighed 5 tons 3½ cwt and was experimental only.

The Oxford Carrier

Last in direct line of descent from the Light Dragons of the 1930s was the Oxford Carrier which was also the last tracked carrier in British service before the adoption of the FV432 series of tracked APCs currently in use. The Oxford saw service in small numbers only and never completely supplanted the Universal Carrier. The last Oxford Carriers were not disposed of until 1963-64, many of those scrapped being virtually 'as new' and never issued for service. The Oxford, and its derivative the Cambridge, are described below to complete the 30 year story of this type of vehicle.

Carrier, Tracked, CT20 (Carrier, Oxford, Mk I): Though a few experimental types of tracked carrier were designed and pilot models built at the latter end of the war, the CT20 was the last of a series of vehicles that were descended from the Light Dragon Mk III of 1935. Designed to a specification intended to produce an improvement on the Loyd and Universal Carriers, the Oxford Carrier was designed to function as an all-purpose carrier. It was produced too late to be used operationally and production was limited. In the early post-war period, trials were carried out on prototypes for the roles of gun-tower for the 6 pdr and 17 pdr anti-tank guns, and as a carrier for the 3 inch mortar.

The hull of the Oxford was of an open box-like welded construction embodying a double floor as protection against



Above: The Tugboat was a T16 with twin suspension units and tracks each side. This is the rear view.



mine blast. The rear portion of the hull contained the covered engine, radiator, two fuel tanks and a Hydramatic transmission unit. The front portion of the hull contained the auxiliary gearbox, Cletrac steering unit, final drive, driver's seat and controls, and seating accommodation for the personnel. The driver was provided with episcopes. The upper portion of the tracks and the track support rollers were covered by armoured skirt plates. Mounted above each track, and forming a part of the superstructure were drop-sided stowage panniers. Suspension was of an improved Horstmann type with four bogie wheels coupled in two units



An Oxford Carrier towing a 17 pdr anti-tank gun with the A/T platoon of an infantry battalion in 6th Armoured Division in the 1950s.

with parallel coil springs. Hydraulic shock absorbers were fitted between bogie wheel axles and the hull. Brief details: combat weight: 7 tons 17 cwt; length: 14 ft 9 inches; width: 7 ft 6½ inches; height: 5 ft 7 inches; Engine: Cadillac V-8, 110 bhp, liquid cooled; max road speed: 31.38 mph; range: 126 miles; armour basis: 20 mm.

The Cambridge Carrier

A number of experimental types were built to determine a possible replacement for the Oxford. The series is outlined here.

Carrier, Tracked, CT21-35R: This was a 35 cwt pay load carrier with Ford V-8 85 hp engine at rear. Designed by Vivian Loyd Ltd, only one prototype was built.

Carrier, Tracked, CT22-35F: This was a 35 cwt pay load carrier, similar to CT21, but with the engine at front. One prototype only was built, also by Loyd.

Carrier, Tracked, CT23: Yet another of the test series, this was a 50 cwt pay load carrier with twin Ford V-8 engines at the rear.

Carrier, Tracked, CT24: Designed by Rolls-Royce, this vehicle had leaf spring suspension and had a hull similar to the Oxford's.

Carrier, Tracked, CT25: This vehicle was as for CT20 but fitted with a Rolls-Royce engine and Merrit-Brown gearbox and transmission.

Carrier, Tracked, CT26: This was a Vickers-Armstrong

design of load carrier, based on A17 light tank chassis. Unladen weight was 10½ tons.

Carrier, Tracked, FV401 (Carrier, Cambridge): This vehicle was designed by Rolls-Royce. It was projected in 1946 and the pilot model appeared in 1950. The Cambridge was of a box-like construction and was fitted with independent torsion bar suspension that was protected by armoured skirting. The engine, a Rolls-Royce B.80, was located at the rear of the vehicle. The front crew compartment was fitted with four hinged armoured flaps that could be raised for extra protection; the driver was provided with episcopes. The sides of the superstructure were fitted with stowage panniers. The vehicle was provided with a collapsible floatation screen. Pilot models only built, and these were troop tested. No production followed. Brief details: weight: 9 tons 5 cwt; crew: 7-8 men; length: 15 ft 4 inches; width: 8 ft 5 inches; height: 5 ft 7 inches; armour basis: 8-16 mm.

Carrier, Armoured, OP No 4 (FV402): This was the FV401 converted to an Armoured Observation Post. It was fitted with an armoured hatch over the crew compartment and carried the necessary wireless equipment.

Wheeled carriers

Finally, there were a few wheeled carrier designs to supplement the tracked carriers. They are described here.

Carrier, Guy, Universal, Wheeled: In November 1939 an order was placed with Guy Motors Ltd for a wheeled carrier based on the Guy armoured car. This experimental vehicle, tested in June 1940, consisted of an open box type body of mild steel, and was very similar in design to the tracked carrier, with the fighting compartment in the front having



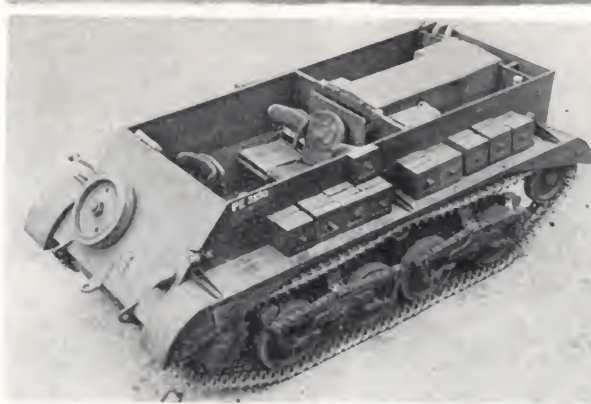
the normal LMG housing. Various Universal Carrier fittings were attached to the superstructure and the engine was situated at the rear in an armoured box. There was one prototype only, and the type was not taken into service.

Carrier, Wheeled, Indian Pattern: Designed to function in the same role as the Universal Carrier, this series of vehicles was produced in India during 1940-44 and they were based on Ford 4 x 4 chassis that were manufactured by the Ford Motor Company of Canada and shipped to India where they were assembled and armoured.

Various marks and sub-marks of this carrier existed and they were used in the Middle East, Italy, and the Far East.

Basically the Indian Pattern Carrier was an open top 4 x 4 vehicle with the engine at the rear and with the driver at the front right-hand side behind flat sloping armour; a hinged hatch was provided to the left of the driver to mount a LMG or Boys anti-tank rifle. Brief details: weight (approx): 5 tons 6 cwt; crew: 3-4; engine: Ford V-8 95 hp. A wireless set could be fitted and there were variants fitted with turret. A few of these wheeled carriers were used by the Commonwealth Brigade in Korea, 1950-53.

July, 1970

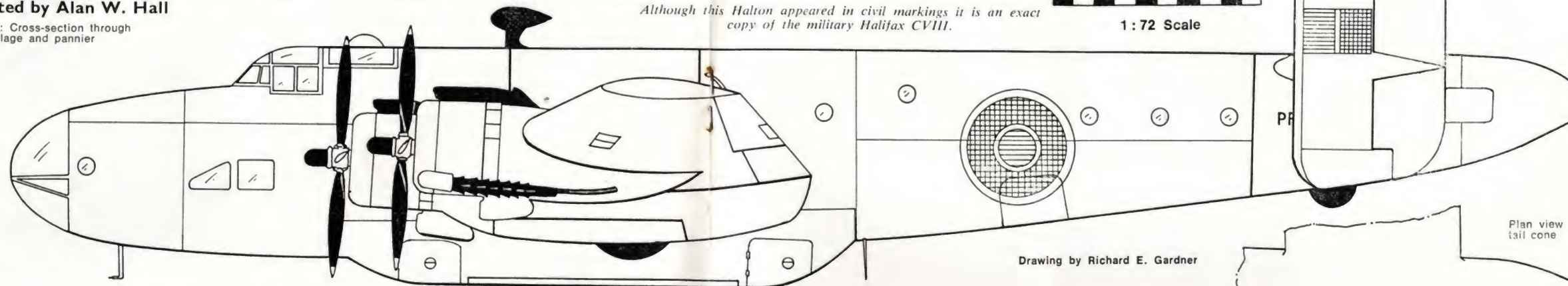
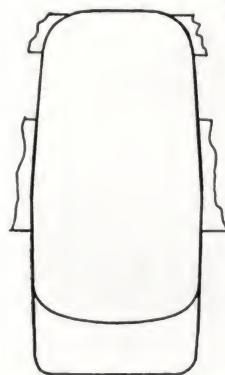


Top to bottom: Cambridge Carrier, fourth pilot model. CT23 Carrier. CT24 prototype vehicle with ballast added for trials. Wheeled Carrier. Indian Pattern. Centre left: Guy Universal Wheeled Carrier (Imperial War Museum photos).

The Halifax freighter

Mk VIII converted by Alan W. Hall

Left: Cross-section through fuselage and pannier



I WELL remember arriving early one wet and windy morning in the Autumn of 1946 at a remote East Anglian airfield as part of an RAF guard of honour to mark the stand down of two Polish transport squadrons. The airfield was Chedburgh and the travel-worn Halifax CVIIIIs standing in the dispersals belonged to No 301 and No 304 Squadrons.

At the time I was more concerned with keeping warm and preventing the highly polished toes of my boots getting damaged by the great quantities of mud to notice very much about the aircraft. Luckily for me, though, there were others who had chronicled these two squadrons and their markings.

The Halifax CVIII was used almost exclusively by these two Polish squadrons. One hundred aircraft of the type were built and later the civil version of the Halifax, known as the Halton, became one of the first freight-carrying aircraft in post-war civil markings. BOAC employed the Halton and others were acquired by London Aero Motor Services who, operating from the small airfield at Elstree and later from Stanstead, ran a charter freight business to Europe, Africa and the Middle East at 10s per mile.

To convert the bomber into its transport equivalent is a fairly easy job for the beginner but it does involve cutting the fuselage and wings about somewhat. A new tail (and nose if the civil version is to be modelled), deletion of the H2S scanner and top turret and a change of wing tip is required, apart from a different colour scheme. The Halifax, like the Airfix Lancaster, remains one of the best kits produced by this manufacturer and it is always a delight to see how easily the parts fit together. The wing to fuselage joint, for example, is a 'glove-like' fit and it is hardly necessary to bother with gluing these two parts together. The



BOAC Halton G-AHDU 'Falkirk' in service during 1946. The aircraft was left natural finish overall. Note the additional fuselage windows and solid nose.



The radome has been removed and the hole filled with thick plastic card. Similarly the upper turret base has been inserted but the top blanked off with a circular piece of plastic. Both upper and lower modifications are covered with a coating of body putty after the two fuselage halves are stuck together.

only part that does not fully match these standards is the cockpit canopy, which needs some adjustment to its rear extremity to avoid a nasty gap where it meets the fuselage.

Reference to the Halifax CVIII is sparse and the two pictures I have used are of the civil version. Other reference can be found in Michael Bowyer's Halifax Profile in the February 1962 issue of Airfix Magazine, Aircraft of the Fighting Powers Volume 6 has a 1:72 scale drawing and photographs showing the all silver prototype of the CVIII.

STAGE 1 Before assembling the fuselage halves the cockpit detail should be stuck in place and the radome removed. I found this easier to do before putting the two halves together as then, I could make a plastic card plug to fit the hole without a lot of unnecessary and fiddling work. A teardrop shaped piece of thick plastic card is cut to fit the shape roughly and stuck on to one side of the fuselage so that when the other side is also glued the new section lies snugly in place ready to accept body putty. The upper turret is dealt with in an almost similar manner but here I used the lower part of the turret structure and added a thick piece of plastic card, cut to a circular shape, to the top. A small amount of body putty completed the job once the two fuselage sides were stuck together. The fuselage assembly must be left to dry for at least 24 hours whilst both the joints and the body putty dries out thoroughly.

STAGE 2 To make the new tail cone the fuselage is cut off at right angles to the centre line just aft of the tailplane removing the slightly bulged area intended to take the turret. Before continuing with the construction it is best to cut the fuselage to take the freight pannier. The area for this cut is simple as it is bounded by the bomb bay doors marked on the fuselage and to do it I used a fretsaw finishing off with knife cuts in the right angles to ensure that the shape removed was square. A rub over with the file is also recommended as one's saw cut is hardly ever a truly straight line on both sides of the fuselage. A look at the plan will show how much wood is needed to fill the pannier area and the tail cone. Always cut more balsa than is necessary in all dimensions as it is easier to remove surplus wood rather than have to replace it. Personally, I leave as much as 3/16 inch extra all round so that there should be no slip-ups when the shaping starts. Both the pannier and tail cone are stuck in place and again left for as long as possible to allow the glue to set. Polystyrene cement was used to stick the wood to the plastic.

STAGE 3 Carving the shapes for the pannier and tail cone are straightforward jobs. The plan must be consulted for detail and it will be found necessary to rub the final shape down with fine sandpaper after having cut the surplus material away with a knife. A mixture of talcum powder and clear dope filler is applied after the work has been completed to satisfaction, left to dry and sanded down again until a smooth finish is achieved. Similarly the radome and top turret areas previously filled with body putty have to be rubbed down finely. It is advisable to add a thin coating of the filler to these body putty areas before painting as they are often porous and a change of texture can be noted when paint is applied. The Humbrol body putty needs this added application which is sanded down to a final smoothness before painting.

STAGE 4 The assembly of other parts of the model can now take place, starting with the wings. When dry the tips are cut off a fraction of an inch outboard of the ailerons and a piece of balsa slightly thicker than

Putting the pannier in place. The original bomb bay has been removed and a piece of balsa cut to fit.



No alteration is needed to the tail unit but note the way in which the new tail cone has been finished. At this stage it has been cut to shape, filled with talcum powder and clear dope mixture and sanded smooth ready for painting.

the cross section and wider and longer than the other two dimensions stuck in place and left to dry. Meanwhile the tail unit can be assembled and the nose and cockpit transparencies added. Body putty will have to be used to fill the gaps at the rear of the canopy and this rubbed down before painting. The new balsa wing tips are then cut to outline shape on the plan and sanded into an aerofoil section. This is followed by the usual coating of filler sanded smooth when dry. Finish this section by adding the engines and undercarriage but not the wheels. These are sanded smooth on the join, painted matt black with silver centres and left on one side until the rest of the painting is complete. Any other details not previously added such as the nose pitot head, radio aerials and D/F loop complete the constructional work.

PAINTING AND MARKINGS All of the fuselage portholes and the nose and fuselage transparencies were covered with adhesive tape before painting to ensure that the colour did not get on the wrong place. This precaution often pays dividends even for the most experienced model

Continued on page 534

GAZ trucks

STANDARD RUSSIAN TRANSPORT

IN 1:76 SCALE

BY GERALD SCARBOROUGH

IN 1931-32 the Russian GAZ 4 × 2, 1½ ton truck was put into production at a new factory in Gorki. It was based on the American Ford AA of 1930 vintage and was commonly known as the 'Russki-Ford'. It was in production at this and other factories from 1932 to 1948 and the AAA 6 × 4 model from 1933 to 1945. These vehicles were used as a basis for searchlights, anti aircraft weapons, rocket launchers, ambulances, etc., the AAA chassis being used as the basis for the BA-10 Armoured Car. Although used throughout the World War 2 period these trucks had a decidedly vintage appearance and for this reason make a more unusual model.

For ease of construction I used a few parts from the Austin K2 ambulance and K6 fire tender kit, these consisting of the wheels, radiator, front part of the chassis, springs and axles. None of these are essential, apart from the wheels, as they can be made from scratch as in fact I did with the 4 × 2 version. An alternative source of wheels is the Airfix Sd Kfz 7 half-track kit and I did, in fact, use these for the inside wheels at the rear of the 6 × 4 version.

CONSTRUCTION

The first job I tackled was the wheels and the diameter of these should be reduced either by turning down in a hand-drill or with fine grade sandpaper wrapped round a six inch ruler, the method I used. For the inserts draw out six circles of 8 mm diameter on 10 thou plastic sheet and mark off the circumference at five equi-distant points. Punch out holes using a leather-punch set to give a hole of 2 mm diameter half inside and half outside the drawn circle. Cut out the final shape and using a pencil or ball pen with a domed end press the insert into soft balsa to give a concave shape. This is shown in the diagrams opposite. For the front wheels first stick a disc into the well to reduce its depth; here in fact I used a 'wheel' from under a Minitank model. Then stick in the insert, convex face outwards, and finally the 3 mm diameter hub centre with hub and wheelnuts embossed. The rear wheels are similar except that no disc is required behind the insert which has the concave face to the outside. Paint all wheels and tyres at this stage.

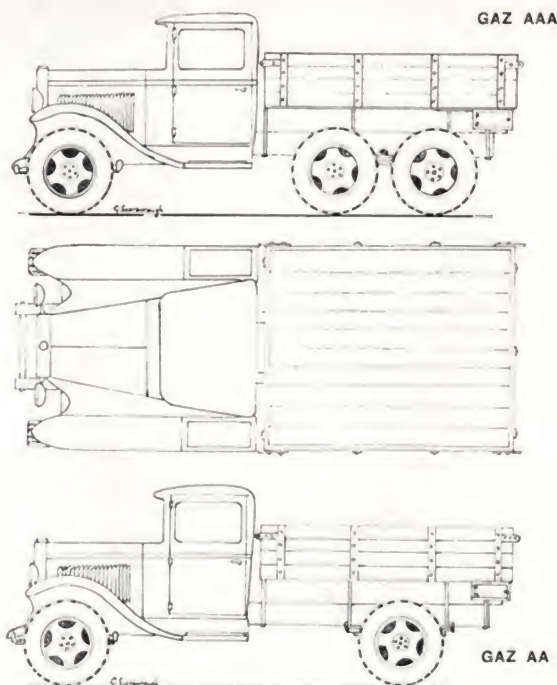
The rear axles from the Austin K6 have their spring mountings carved away to allow the inside wheels to slide further on, and the ends are trimmed off to allow the double wheels to sit at the correct track. When you have all wheels stuck in position true on their axles stand the completed

wheel and axle units on a flat surface, parallel and at the right distance between centres and add the reversed springs close up to the inside of the wheels. Cement a length of sprue approx 2 mm diameter across between the spring centres and allow all to set.

The cab is quite straightforward; cut out the floor allowing for the thickness of the sides and rear; then cut out the two bonnet and cab sides, scoring in door and bonnet lines and louvres. The back has its rear



The GAZ AA model seen here in its component parts before assembly.



GAZ AAA

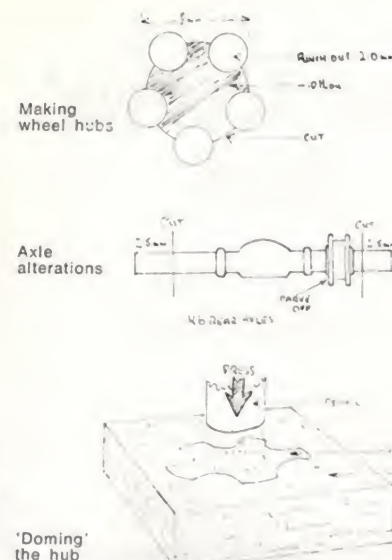
GAZ AA



Ideal to go with the Airfix OO/HO Russian troops are these 1:76 scale GAZ trucks, standard World War 2 type of the Soviet forces. Models are here shown in a wargames terrain.

window cut out, and like the roof is from 40 thou sheet. The screen is from the K2, flattened and with the centre cut out to reduce the width. The bonnet top is 40 thou sheet with 20 thou sheet cemented underneath to assist location of the bonnet sides. Sandpaper the bonnet top, cab roof and rear to shape. After a dry run assemble the cab/bonnet making sure all is true and square but do not put the roof on until after installing seats and steering wheel, if required, and painting the inside of the cab. Trim the radiator and cement in place squarely on the front and give a final sanding when all is assembled and dry.

The mudguards are from 40 thou sheet cut into strips of the required width and length, shaped and sandpapered to half round section. To obtain the correct curvature they were moulded round a large roller bearing which had been heated close in front of the fire, it sounds crude but it does work. Any metal bar or copper water pipe of the correct diameter would do of course but I happen to have various sizes of roller bearing to hand and they do come in useful. Getting the heat right is not



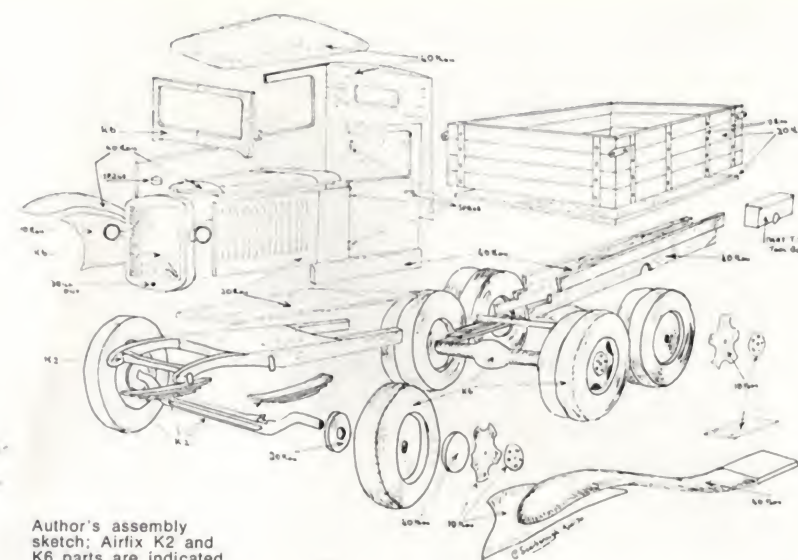
'Doming' the hub



Another view of the two completed models, the GAZ AA having its bonnet shown open.

difficult—if you can still bear to hold the bar it's about right. You do, of course, have to form a double curve, one from each side. I made the two mudguards together by Sellotaping them side by side, and this did ensure that they both came out at the same curvature.

It should now be possible to assemble the front of the vehicle, the cut down chassis with fuel tanks and rear cross member removed, springs, front axle, and the bonnet/cab assembly. Add the strips shaped from 40 thou under the doors and



Author's assembly sketch; Airfix K2 and K6 parts are indicated

running forward to the chassis. The mudguards as made so far should be joined, so that they are the correct distance apart and parallel, by a strip of 10 thou plastic underneath the footboards. This will then cement in place underneath the chassis/cab and you can then add the rest of the mudguards from 10 thou sheet bending and moulding to fit, and giving a final sanding when all is dry.

The rear chassis can now be made and this will fit between the side members of the front chassis. Do make sure it lines up accurately. The rear body is simply made from 20 thou sheet, the floor fitting inside the sides and ends. Score sides inside and out, and also the planking on the floor before assembly. Add the body ironwork from 10 thou strips with the bolt heads impressed from the back, best done before the strip is cut out. Mount the finished body squarely on the chassis.

At this stage it is a good idea to get some of the painting done before fitting the rear axle assembly and the front wheels as otherwise a lot will be inaccessible. Attach the front wheels and see that they are set

leaning out slightly at the top and allow to dry. When dry, set up the model on the rear axle unit and check the 'sit'. If it is to appear empty then it should have a forward lean, if to be loaded it should sit level. The correct attitude can be adjusted by the depth of cut out of the seating in the bottom of the chassis.

The GAZ AA 4 × 2 is made almost exactly as the 6 × 2 except that there is of course, only the one axle at the rear. To try to give my model a bit of 'life' I made it with the door open and the bonnet up. Under the bonnet there is a dummy engine block, radiator hose and steering wheel shaft. I shall eventually add a driver peering in the bonnet to help the illusion that it's broken down.

The finish is a greyish green or olive drab for the wartime period, or dark green for post-war. Pictures also seem to indicate vehicles painted plain light grey or black, though the latter was almost certainly a civilian vehicle. The completed models are, of course, just the thing to transport the Airfix Russian troops, and as scratch-built vehicles go they are easier than most.

NEW BOOKS

REVIEWED FOR MODELLERS

The Phantom

F-4 PHANTOM II, by Richard E. Gardner. Published by Almark Publishing Co, 104-106 Watling Avenue, Edgware, Middx. Price 12s 6d.

WRITTEN and illustrated by Airfix Magazine contributor Richard Gardner, this book is obviously aimed straight at the modeller as well as the aviation enthusiast. It tells the story of the Phantom in great detail, supported by about 50 pictures, most of which have not been previously published. There is wide colour coverage, with photographs in colour of USN and USAF aerobatic team Phantoms on the front and rear covers and multi-

July, 1970

view colour drawings of the USAF standard camouflage scheme and the RAF/RN schemes, plus side views of RAF, RN, and USN aircraft to show both colours and typical ordnance loads. All specification numbers are given for the paint shades used and among the tables are colour scheme charts which include all relevant colours with their Humbrol equivalents for modellers. There are 1:72 scale line drawings (Airfix Magazine style) to show all production models and prototype details, a line drawing of the Iranian colour scheme, and extensive data tables, as well as stencil details and so on. All in all a handy reference book for anyone modelling Phantoms, presented in an interesting way.

The Eighth Air Force

THE MIGHTY EIGHTH—A HISTORY OF THE US 8th ARMY AIR FORCE, by Roger A. Freeman. Published by Macdonald and Co. Price 75s.

THIS is the second book to appear in recent months from Macdonald by a writer who lived in the centre of the events he writes about. Like John Rawlings, Roger Freeman was busy recording the aircraft of the 8th from their arrival in Britain in 1942, and one can sense this throughout his masterly volume.

The book is almost a day-by-day account of the activities of

Continued on page 542

'Red Arrows' Gnat

ADAPTING THE AIRFIX KIT
BY ROGER CHESNAU

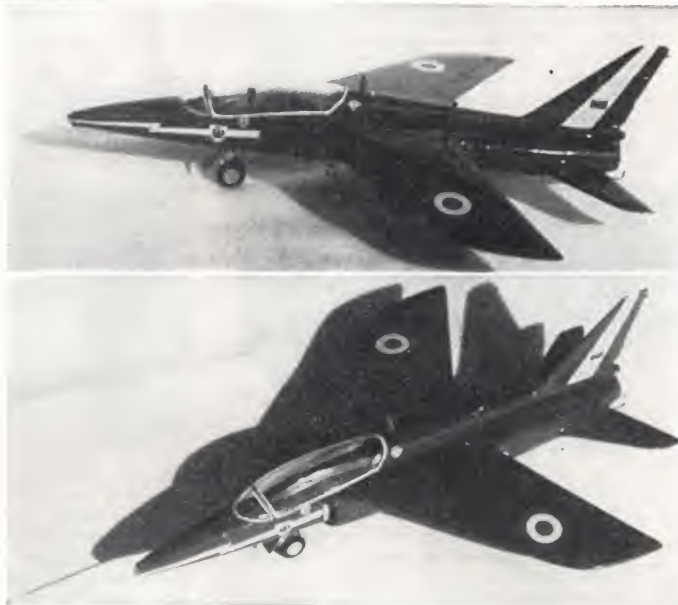
THE season of air displays and open days is upon us once again, and we can be sure of some more thrills from the Red Arrows. Such is their fame that they deserve to be represented in every collection of contemporary model aircraft. The work involved in turning the Airfix kit into an acceptable Red Arrow is comparatively simple, although it does call for a steady hand and a good quality pair of pointed tweezers.

The kit itself is basically accurate, but because of its age the fit of the component parts is not now as good as it originally was. Also there is some flash and a number of small moulding defects which are easily remedied by careful sanding. The kit can be assembled following the instructions, but note that the tailplane shape is not quite right and the main wheel well recesses need to be reshaped. The underwing locating holes are filled and the tank fairings sanded off. Additional doors must be fitted to all three main covers (see plan). The jet orifice, too, needs some attention with a round file, and the intake lips could do with some sharpening up. The pitot head is a little too thick and is best replaced with suitable stretched sprue, and the cockpit interior can be detailed using the accompanying photograph as a guide.

Now for the details—and be prepared for some floor-searching, as you are bound to drop at least a few of the minute pieces which need to be added! The alternator cooling duct has to be slightly enlarged and a 'Q'-gearing unit fairing built up with body putty aft and to starboard of this. Remove the three main aerials from the model and sand flush; new ones can be fashioned from very thin plastic card and re-positioned. The belly UHF aerial goes in the same place as the original, but note that the top rear UHF aerial is offset and angled to port, and the dummy forward one goes to starboard. The undercarriage warning light, anti-collision lights and signal light are added from scrap plastic (rocket heads suitably modified are ideal), while the triangular Tacan aerial is cut from thin card and cemented in position.

Boundary layer air bleed separators are cut from card and inserted into each main intake, leaving a small gap next to the fuselage, and smoke generators made from heated sprue and added. The aileron servos need to be modified (see plan), and a rudder actuating lever and trim tab fixed into position. Small

Below: XR986 taxis in earlier this year at Manston whilst the Red Arrows team was working up for the summer air show season. This machine is piloted by Sqn Ldr D. Hazell whose name is stencilled under the cockpit. Note the small squadron leader's emblem painted right forward (Photos by Freddie R. Smith).



Above: Two views of the completed model, finished as XR996, drawn opposite.

recesses can be filed out for the wingtip navigation lights and pieces of clear plastic carefully cemented in and sanded to the wing profile and polished when dry. Finally, a very thin VHF aerial under the starboard wingtip is added. It is best to use liquid cement for these delicate operations since it is easier to apply in small quantities than the tube variety.

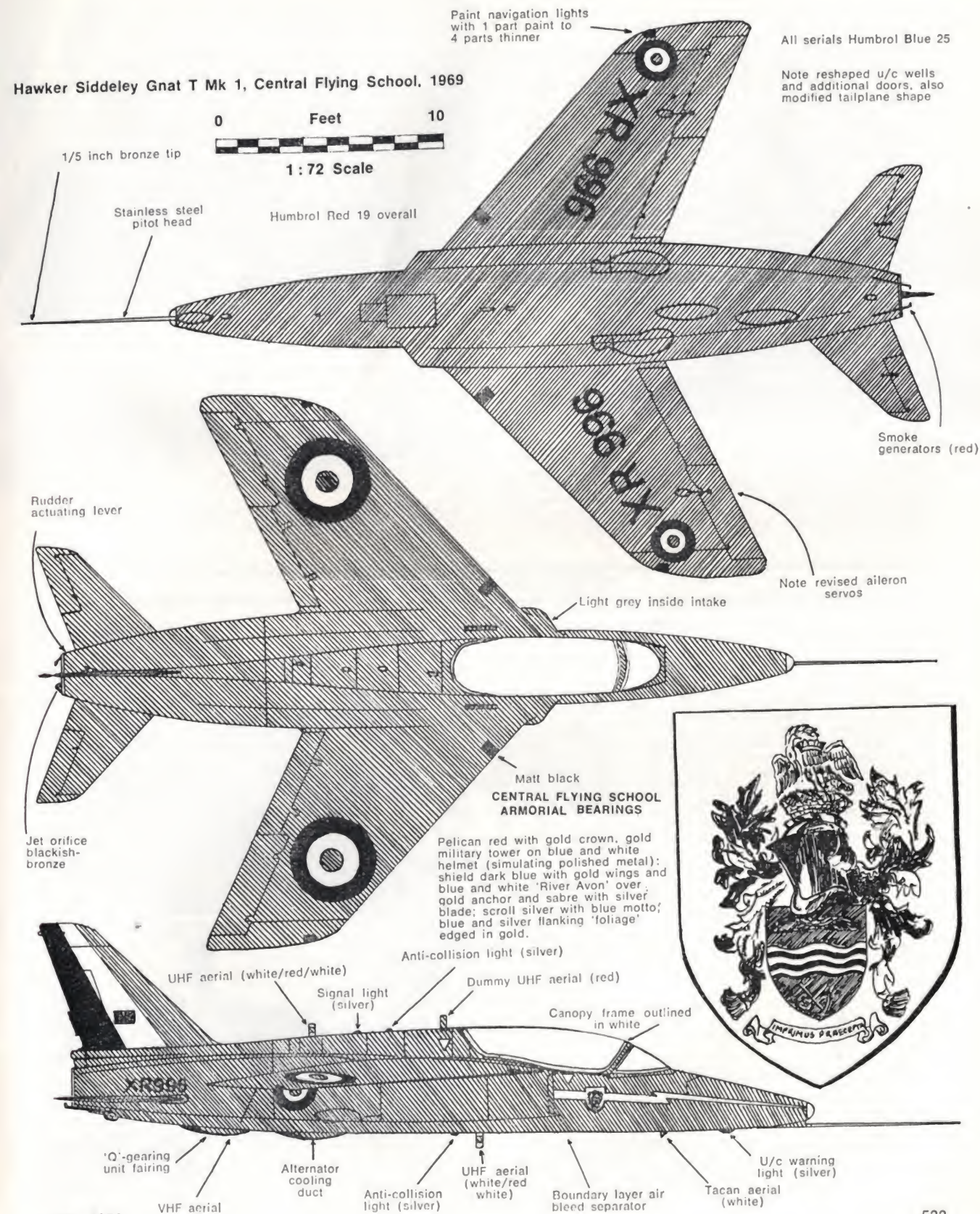
Painting the model is very straightforward—I used Humbrol Red 19 overall and Blue 25 for the tail stripe; details are as shown in the plan. The roundels as supplied with the kit are quite acceptable but other markings require patient attention. I painted the Union Jack on blue sheet transfer with an old mapping pen dipped in thinned paint, and the armorial bearings below the cockpit using the same method with white transfer. The nose trim was also cut from white transfer, as were the ejector seat warning notices, which can have the details picked out in red after application. The roundel-blue serials must be hand painted, but to make the task a little easier suitable white Letraset transfers can be applied and then overpainted. Thinned blue paint is used, applied to the centre line of each digit stroke—the colour spreads over the digit by surface tension. A coat of clear varnish seals the transfers and completes the job.

The model makes an interesting comparison for the Airfix 'Treble One' Hunter, which, of course, represents the immediate predecessors of the Red Arrows. CFS Gnats have a good few years of life left in them yet, but what about the future? The mind boggles at the thought of a team of waltzing Harriers!

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AIRFIX magazine

Hawker Siddeley Gnat T Mk 1, Central Flying School, 1969



July, 1970

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Above: Red Arrows' line-up at Manston during practice sessions for this summer's air show season. XR986, also pictured on page 532, is the nearest machine. The very small squadron leader's emblem is visible just above the 'zig zag' in the fuselage flash. Lettering just below the windscreen reads SQN. LDR. D. HAZELL (top line) and CT. G. M. Sueter (bottom row). Right: Take-off view shows clearly the fuselage aeriols (Photos by Freddie Smith). Top right: Close view of cockpit instrumentation for super-detail fans (Hawker Siddeley).



Thanks are due to the CFS Detachment, Kemble, for their assistance in the preparation of this article.

Halifax freighter—from page 529

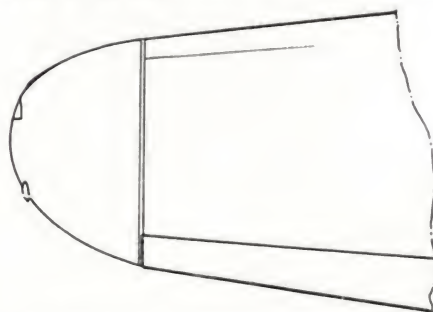
maker. All undersurfaces are azure blue (Humbrol Authentic Colours HB13) whilst the upper surfaces are sea grey medium (HB6) and dark green (HB1). Codes were white and serials black; propeller spinners were azure blue and the front part of the engine cowls should be painted a mixture of silver and black.

RAF roundels appeared in the standard six positions and the serial was repeated under the wing. No 301 Squadron used the codes GR whilst No 304 had QD. GR:A was serialised PP332 and QD:G was PP270. Fin flashes and fuselage roundels came from Driedge sheets and the wing roundels came from spares from other kits. The fuselage serial was again from the Driedge sheet and those underwing were found on a Yeoman transfer sheet. The Polish insignia on the nose of GR:A came from Driedge and the letters TA in front of it were found in the spares box.

A notable thing about the Chedburgh Halifax CVIII was the rather disreputable state in which they ended their days. When I saw them they were streaked with oil slicks above and below the wings and the grey/green paint scheme had passed the stage of being recognisable. How this can be done by the model maker is up to his own ingenuity. My own model was completed with the oil slicks but I drew the line at trying to fade the camouflage scheme—maybe a few months out in the garden would do the trick!



AIRFIX magazine



Plan view for extended wing tip drawn to 1:72 scale

Top right: With all modifications complete the Halifax CVIII is ready for painting. Note that the nose transparency and cockpit area have been masked with adhesive tape. Right: The completed model, GR:A PP332 of No 301 (Polish) Squadron.

BMW Rennsport

By A. R. Vernon

THE Rennsport racing machine bears little apparent resemblance to the touring R.69 but can, with a little effort, be constructed from the basic Airfix kit. Cement together the frame halves, allow to dry then cut at the points indicated on Fig 1. Note that at point B the upper rear frame should be carefully bent upwards and not completely removed.

Re-cement the frame sections together as in Fig 2, adding the rear sub-frame bracing (these are the pieces of sprue supporting parts 32/33 but cut to size). Add the rear fork, first removing the universal transmission joint from the right-hand fork leg and the rear suspension units. Before attaching the suspension units wind fuse wire around the upper sections to simulate springs.

Assemble the front fork, again adding fuse wire 'springs'. Cut down the handlebars to 20 mm and cement to each upper fork leg, notching each leg to accommodate the handlebar securely. Attach the front fork to the frame and add the tachometer mounting to the steering head as shown; a piece of rounded sprue 20 mm long will do.

Footrests (parts 64/65) are cemented to the frame next, Fig 2. Mudguards are optional. I used Moto Modelli ones cut down but part 44 can be used if sand-d down and trimmed to shape. The racing saddle can be carved from wood or constructed from card. Instead of painting, I covered the seat on my model with Ambla car seat material which looks very effective.

Assemble the wheels as per kit instructions. The rear wheel is unmodified but the front wheel hubs are altered to accommodate a cooling mull on the left-



The BMW Rennsport makes an imposing but not difficult conversion from the Airfix BMW R.69 kit. This picture and those below show right and left views with and without the fairing. Note megaphone exhaust, made from paper.

hand side and an air-scoop and torque-stay on the right. The mull is optional and was only fitted on one machine (that ridden by G. E. Duke in the 1958 TT). A card disc of 35 mm diameter is slotted around the periphery and each torque turned inward. The torque arm and air scoop are also made of card.

The BMW racing engine closely resembled the road-going motor so this conversion is quite simple. Cement the engine halves together and when dry cut away the air filter mounting and fill the resulting hole in the gearbox, finishing with a smooth surface. Cut away the breather pipe (as detailed in the R.69S conversion, April 1970 issue) and bore a hole in the crankcase in line with the original position 5 mm to the left. Cut away the pushrods and bore a hole midway between their original positions; into this cement a rounded piece of sprue

15 mm long and 3 mm thick. This represents the camshaft drive.

Add a sump-plate as in Fig 3 to the crankcase and assemble the cylinders and cylinder heads, cutting away the fins between the pushrod tunnels so that there is a continuous groove down the cylinder.

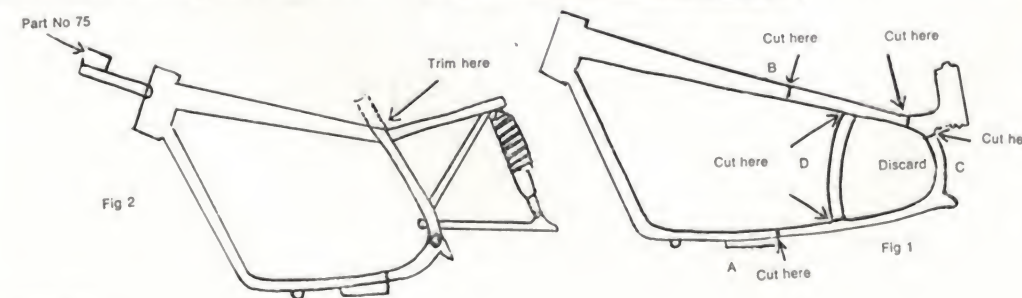
Cement the cylinders to the crankcase, locating the camshaft drive in the grooves. Fill and smooth the cylinder heads as in the photograph and bore four holes in a square pattern in each head. This gives a very vague representation of the Rennsport's heads, though to be really accurate the cylinder heads should be built up from scratch.

Cut off the intake pipes from the carburetors, leaving a small stub, and cement on bell mouth intakes. I used bushes from an Airfix Racing Mercedes front axle unit but pop rivets would achieve the same effect. Cement the carburetors to each cylinder at a slight upward angle to simulate downdraught.

Insert the completed engine into the frame and attach the exhaust system which consists of the kit pipes and rolled paper megaphones 65 mm long and 10 mm in diameter at the tail. The exhaust pipes should be cemented at an angle to the engine so that they sweep in at the bottom. Make up supporting brackets from parts 32/33 cemented to part 27 cut in half. Fit the gear lever to the gearbox, but reversed, and cement the rear brake linkage to the frame and rear hub. Cement the brake pedal (cut down to 12 mm long) to the frame just below the right-hand footrest.

The petrol tank is similar to the R.69S conversion but general dimensions will be apparent from the photographs. Ensure

Continued on page 536



Construct from card
Fig 3

HMS 'ARIADNE'

First of a new occasional series featuring famous warships

HMS *Ariadne* was one of a pair of fast minelayers completed in 1943-44 as repeats of the famous 'Abdiel' class. The original four 'Abdiels' proved so successful, both as minelayers and as fast transports, that two more were laid down late in 1941.

The *Ariadne* and her sister *Apollo* proved to be a much-needed reinforcement, for between 1941 and 1943 three of the 'Abdiels' were sunk. As a class these ships were unique in combining very high speed with good mine-capacity. In fact their mine-decks proved so capacious that the ships were soon used as fast transports to ship vital fuel and ammunition to Malta during the dark days of 1941 and 1942; one of them, the *Latona* never stopped her transport runs long enough to lay a mine.

Structurally, the fast minelayers were enlarged destroyer types, but they had the forecastle deck extended right aft to provide an enclosed mine-deck from abaft the bridgework to the stern. To give them the speed necessary for rapid transit to and from their area of operations, they were given a power-plant equivalent to a cruiser, 72,000 shaft horsepower on only two shafts, which gave a theoretical maximum speed of 40 knots.

Right from the start these handsome ships caught the imagination of the public. Their phenomenal designed speed was higher than anything attempted before in British ships, and their heroic runs in and out of Malta made their names famous. Myths surround these vessels' achievements, and the fantastic speed of 44 knots has often been claimed for them. The highest trial speed recorded, however, is a shade over 37 knots, which remains a tremendous achievement when compared with contemporary destroyer speeds.

The *Ariadne* and *Apollo* differed from



Ariadne's sister ship *Apollo* was identical in all respects and is shown here in post-war service by which time the radar installations had been altered slightly. Also twin Bofors mounts replaced the Hazemeyer mounts amidships and the port side mounting is clearly visible in this view. *Ariadne* herself did not see post-war service.

Laid down	Launched	Completed	Built and engined
15 Nov 1941	16 Feb 1943	9 Oct 1943	Alex Stephen & Sons, Glasgow
Displacement: 2,650 tons (standard), 4,000 tons (full load)			
418 ft (overall) x 40 ft x 16 ft (max)			
Guns: 4 x 4 inch HA Mk XIX (2 x 2); 4 x 40 mm Bofors AA (2 x 2); 12 x 20 mm AA (6 x 2)			
Armour: Nil, excepting bullet-proof plating on bridges etc.			
Mines: 160			
Complement: 246			
Machinery: 2-shaft Parsons geared turbines, 72,000 SHP=37 knots (max); 4 Admiralty 3-drum boilers			

the first four ships principally in sacrificing a twin 4 inch high-angle gun mounting in 'B' position in favour of a twin power-operated Oerlikon mounting, and in having two twin Hazemeyer Bofors guns in place of a four-barrelled pom-pom aft. In most other respects they were identical to the original *Abdiel* class, but they incorporated the improvements in radar available by 1944. No fewer than eight different types of radar were fitted, 285M, 272, 251, 252, 242, 253, 291 and 86M, in addition to TBS (Talk Between Ships) and MF/DF radio equipment.

The mine-deck was arranged in two parts. The main set of rails ran from abaft the bridge-structure, with single sets of rails running aft on either side of the boiler-uptakes and machinery spaces. Aft the machinery there were two additional rails inboard, which joined the outer rails before reaching the stern-doors. There were four mine-loading hatches, two port and starboard abreast of the forward funnel, and another two abaft the cranes. The combination of mine-rails and cranes gave the ships a unique advantage among warships

for rapid unloading of cargoes such as cased fuel and ammunition. For this reason they could dash into Malta under cover of darkness, off-load their cargo quickly, and leave as soon as possible.

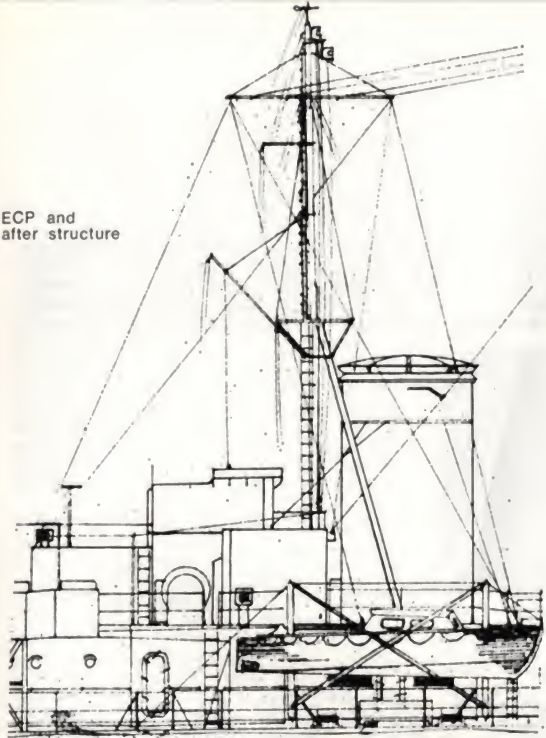
Ariadne was the seventh ship of the name, which commemorated a heroine of Greek mythology rescued by Theseus. The previous ship also served as a minelayer, being torpedoed in 1917. It has just been announced that the name will be given to a new frigate of the 'Leander' class.

HMS *Ariadne* was commissioned in September 1943 and laid mines off the coast of Norway. She left Home waters in January 1944 to join the US 7th Fleet in the Pacific. In June 1944 she laid 146 mines off the northern coast of New Guinea, and three months later she carried out another lay in the same area. When landings were made in the Mapia group of islands in November she served as a troop-carrier for the British NOTC amphibious operation. *Abdiel* laid 1,352 mines in all, and after the end of hostilities she was used to evacuate former prisoners-of-war from Japan. Subsequently she was laid up in the Reserve Fleet at Sheerness and never re-commissioned. She was eventually sold to W. H. Arnott Young, and arrived at Dalmeir for scrapping in February 1965.

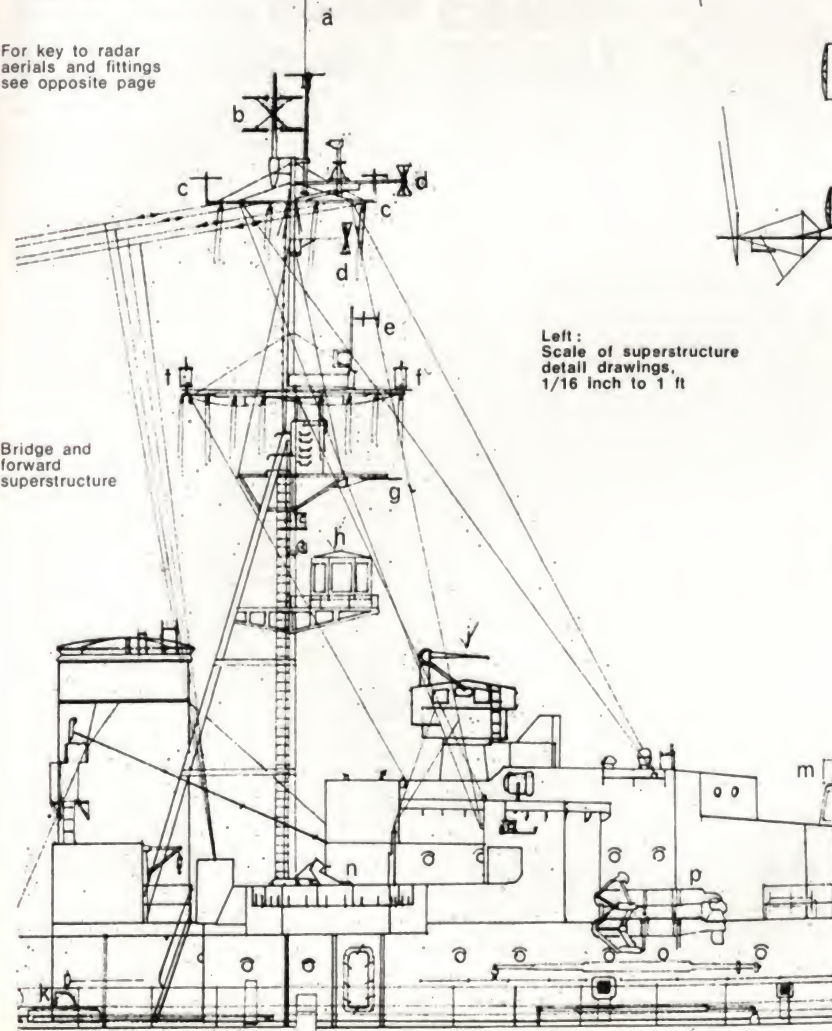
Key to fittings and aerals shown on enlarged drawing opposite: (a) TBS aerial. (b) Type 291 aerial. (c) Type 86M. (d) Type 253. (e) Type 242. (f) IFF aerals. (g) Type 281. (h) Type 272. (j) Type 285M. (k) Mine embarking hatch. (m) MF/DF aerial. (n) Twin 20 mm power mount. (o) Paravane boom. (p) Paravane.

Note: The 1:600 scale drawing is a reduction adapted from a very complete set of drawings of *Ariadne* available from A & A Associates. The originals are to a 1/16 inch to 1 foot scale and show full hull and fittings. The enlarged views are reproductions from the full size drawings. The complete set of drawings costs 35s (including postage) and is available from A & A Associates, 102 Mattison Road, London, N.4.

ECP and after structure

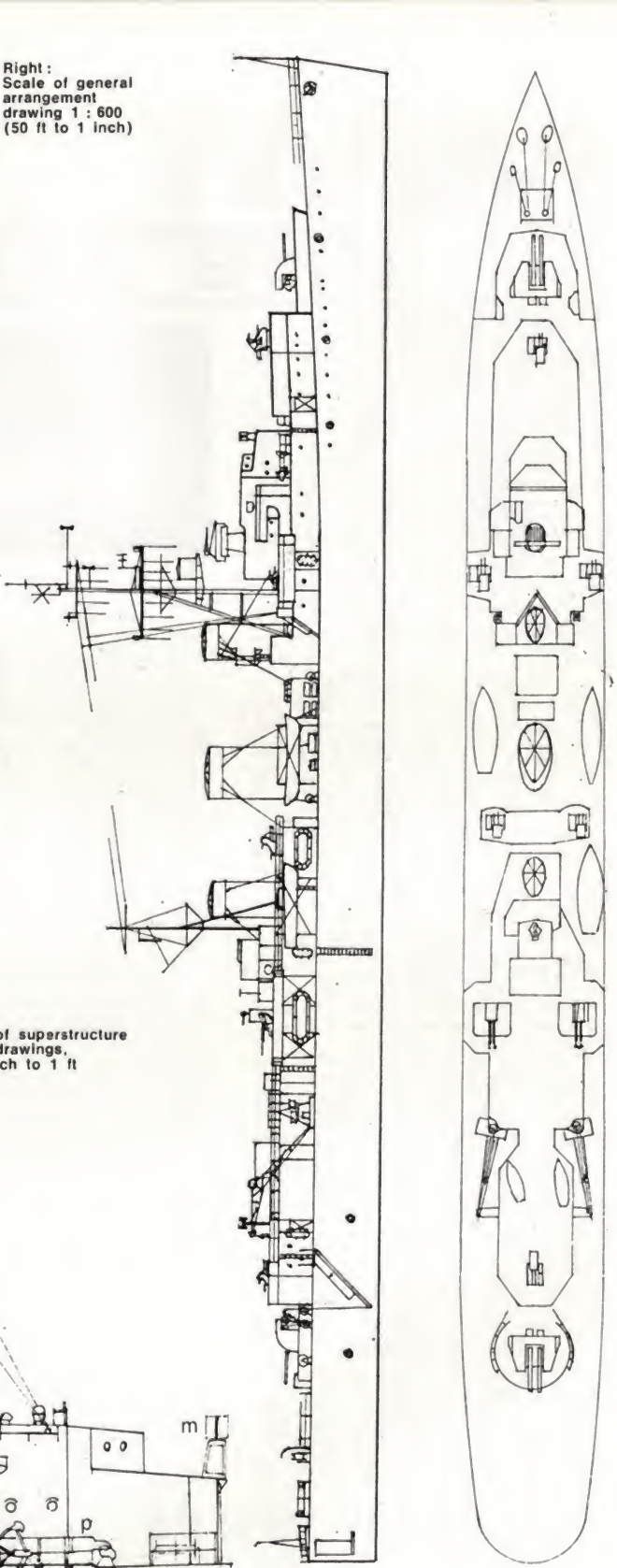


For key to radar aerals and fittings see opposite page



Bridge and forward superstructure

Right: Scale of general arrangement drawing 1:600 (50 ft to 1 inch)



Left: Scale of superstructure detail drawings, 1/16 inch to 1 ft

BMW Rennsport—continued

that the maximum width is not less than 25 mm. The filler cap can be modified to represent the quick action type by cementing an 'L' shaped piece of wire to it.

Obtain a piece of twinflex electrical wire (the clear covered variety), strip out the wire (which can be used for control cables) and run a length from the crank-case breather hole to a rear extremity of the machine. This represents the breather pipe and is sited to vent oil mist well away from tyres, etc.

Number plates 25 mm long, 21 mm wide can be added to the rear subframe and, if an unfaired machine is desired,

to the front forks.

The fairing on this model is quite simple to construct. Two side pieces of thin card are cut out, and strips of card are glued from one to the other to form the front, a number plate is added and the whole is smoothed over with body putty. A similar method can be used for a touring fairing to be fitted to the R.69S described in the April 1970 issue.

The colour scheme for the Rennsport was black frame, tank and cycle parts. Silver grey engine and wheel hubs and gloss silver or white for the fairing. Number plates were yellow with black numbers.

NEW

KITS AND MODELS

FOR TANKS

BELLONA, of Hawthorn Hill, Bracknell, Berks, are now importing the Armtec series of plastic moulded AFV accessories from America. There are four sets in the range. No 1 features one German MG 34 and one MG 42 each with optional bipods, shields, AA pintles, and drum magazines for assembly as desired (so they can also be used with OO/HO figures). No 2 is a set of 10 jerricans, No 3 a set of American AFV tools and stores, and No 4 a set of German AFV tools—enough for fully stowing a model Panther or Tiger. Price is 3s 9d a set plus 6d postage. This is on the high side, but the items are exquisitely moulded and presumably produced on a short-run basis. *C.O.E.*

TAMIYA PHANTOM

TAMIYA'S growing range of 1:100 scale kits continues with a neat little model of the F-4E Phantom II, a development of the F-4C which has not yet been covered in 1:72 scale. The kit highlights the F-4E's re-contoured nose and slotted tailplane leading edge.

Cleanly moulded in white plastic with delicate surface detail, the model has 37 parts which fit together well, and a stand similar to those supplied in Frog kits. A complete parts inventory, Revell-style, is included. Assembly closely follows the procedure for the Airfix Phantom except that the upper and lower wings are moulded as one component. Unfortunately, the arrestor hook has been cast in a fixed, retracted position but most modellers will probably make a lowered hook out of scrap plastic.

Underwing stores are provided and there is a choice of transfers, one set for a camouflaged machine in tan/green/grey finish, the other for a member of the USAF's Thunderbirds team. The latter is a challenging proposition for novice and expert alike, since the multi-colour markings have to be painted by hand. Beginners should note that one set of 'stars and bars', for the camouflaged Phantom, is supplied without the blue outer borders.

The kit costs 9s 11d, and our review sample came from Jones Bros of Chiswick, who can supply by post, postage extra. *B.R.*

FROG METEOR

THE Gloster Meteor, strangely neglected by manufacturers after Frog withdrew their F8 six years ago, thankfully re-appears on the modelling scene as an F4 from Frog moulds. It is a short-span variant with colourful transfers for VT328 of 263 Sqn, RAF, or Y9-8 of 323 Sqn Royal Netherlands Air Force. Both machines, incidentally, are illustrated in Edward Shacklady's Meteor monograph.

The F4's distinctive fuselage profile is re-created almost to perfection, but the gremlins have got at the wing assemblies



The Meteor's graceful wings are notoriously difficult to reproduce satisfactorily, and Frog have evidently encountered snags here. The aileron trim tabs are too thick for scale accuracy, and a lot of smoothing down—with consequent loss of detail—is needed on the engine nacelle joints.

Main undercarriage legs are sturdy and convincing, but why Frog should mould the nosewheel and its leg as one complete unit is beyond us—this is harking back to the ancient F8! Assembly is straightforward, each of the 35 parts being clearly numbered on the sprue. Underwing drop tanks are included, though these, of course, are optional.

Despite its annoying faults, this kit will be snapped up by all 'Meatbox' fans and, we suspect, converted just as quickly! It costs 4s 9d and our review sample came from Jones Bros of Chiswick, who hold stocks. *B.R.*

NEW ALMARKS

LATEST aircraft transfer release from the Almarks range make a venture into the multi-engine field, being sets of markings for two Airfix 'heavies', the Lancaster and Halifax. Chosen are 'Vicky' of 48 Sqn RCAF and 'Uncle Joe Again' of 463 Sqn RAAF, both of which are replete with colourful personal markings and much minute lettering. This is certainly the best yet from the Almarks range, with excellent registration on some of the complex outlined lettering. For the Halifax the modeller needs to add lengthened wingtips (as in this month's Halifax CVIII conversion) but otherwise the transfers simply replace the kit transfers and, indeed, they could be added to existing models. Price is 5s 9d.

Also from Almarks come 1:76 scale transfers for the 'Six Day War' of 1967, two sheets which give a wealth of tiny Israeli and Arabic markings applicable to the Midori Patton tank and T-54 and the Airfix M3 half-track, Sherman (if converted), Jeep, and JS3 and T-34/85. There is a certain amount of explanatory material on the positioning of these markings included on the instruction sheet: but the modeller really needs to seek out his own pictorial references to get the best out of the set. However, they give wargamers more than enough to field complete miniature armoured brigades of authentically marked vehicles

for this famous tank war. Each of the two sets (TS3 and TS4) costs 5s 9d. A feature of all these new sets is the re-designed packaging which is not only neater than before but presents the instructions in a more standardised and interesting way. *C.O.E.*

NEW TOOLS

THOSE modellers who seek a good fine hacksaw for plastic modelling purposes will find just the thing they need in a new Eclipse tool which is stocked by Jones Bros, 56 Turnham Green Terrace, Chiswick, London W4. This comes with a neat wooden handle and three blades of varying pitch which can be changed very quickly simply by unscrewing three nuts. For all normal purposes (like sawing off wingtips in conversion work) this is a very handy item to have in your tool set. It will also saw wood and probably metal (though we haven't tried it on the latter). The price is 8s 6d and spare blades come at 10d a time, postage extra in each case. This tool is well worth having at its modest price if you do not already possess a good saw.

Another item many modellers will find handy is the Expo Titan drill which costs £5 5s (postage extra) and is a well-made 12 volt power drill intended for drive from a battery or via a model railway type of transformer/rectifier. It comes with cable and three collets of 1/32, 1/16, and 3/32 inch size. Thus it will be seen that very tiny 'pin' drills cannot be used, but for most purposes the Titan drill is fine and it can be used with plastic, wood, metals and even mild steel. The sample we had on loan proved a powerful machine, easy to hold, and smooth in operation. Tommy bars and chuck screws are supplied. This item was also supplied by Jones Bros.

Finally, for 3s 6d, Jones Bros have a very neat pair of tweezers with exceptionally fine well-shaped points intended specially for modellers. Nicely made and easy to hold, they proved just about the best tweezers we've experienced for positioning tiny parts in perfect safety. We suspect that they may be surgical in design. *C.O.E.*

MORE TRANSFERS

A NEW Italian series of aircraft and tank transfers is shortly to be introduced by Riko in Great Britain and by courtesy of Jones Bros of Chiswick we were able to see an advance sample, actually for sheet No 3. This features personal and unit markings for three Me 109Es and three Fw 190s and a feature of the sheets is the attractive colour presentation which incorporates a loose leaf colour scheme sheet showing the subject aircraft in Profile-style side view. A further multi-lingual sheet shows all the markings, again in colour, with explanation of derivation and positioning.

Continued on page 540

MODELS

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New Kits—continued

An ambitious programme of new releases (several a month) is promised, starting this month, and coverage will include all the popular aircraft and tanks. On the basis of having seen only one sheet it is not really possible to give a definite verdict on quality. On the sheet received, however, there were several shortcomings; the colour views showed one side only with no indication of top or under surface markings and the sheet was in a way incomplete in that 'kill markings' shown on the colour views (and some other markings) were not included in the sheet and would have to be sought elsewhere. Similarly, there were no crosses and these would also need to be taken from other sources; as some are non-standard types this might present problems. The colour schemes appear to be taken from Profiles and Aircam books, however, so there are other sources of reference available. On our sample there were one or two registration faults. Finally, many of the markings included (mostly for well-known aircraft) are already available on other transfer sheets. So at 9s 11d, colour apart, this particular sheet doesn't seem to offer as much for your money (certainly in terms of supporting references) as British transfer sheets like those offered by Modeldecals, De Frey, Almarks, and Dri-Dec. Jones Bros have stocks of this sheet, and probably of others, by the time this appears in print. C.O.E.

FRENCH MAN-OF-WAR

FROM Jones Bros of Chiswick we have had a sample of the kit for the *Royal Louis*, made by Heller of France. Originally built about the same time as HMS *Victory*, the *Royal Louis* was a similar first-rate three-decker. She was the flagship of the Comte d'Estaing whose squadron was routed by Vice-Admiral Howe when they attempted the capture of Newport, Rhode Island, in the disputed American territories in 1776.

The kit scale is 1:200 and the parts are very strongly moulded, with an excellent wood-grain surface effect where appropriate. They fit together accurately and there is almost no flash. Full instructions and diagrams are provided in French with a complete English translation of the narrative but not the diagrams. This translation is quite good, except that the colouring instructions for the stern are incorrect, but the diagrams on the main instruction show the correct colours (in French) quite clearly.

The photograph shows the complete hull ready for the masts to be installed. Of the original 120 guns, no less than 96 are included in the kit, each one with its own separate carriage. An unusual feature is the separate gun decks inside the hull which permit all of the guns to be correctly mounted, instead of the more usual simple separate barrels cemented into holes in solid gunports along the lower deck levels. Even more unusual is the frame provided for the modeller to make his own shrouds and ratlines, none of which are provided. We are very impressed by the high standard of this kit. The only criticism we could make is that the deck planking, while looking very effective, is actually well out of scale at a plank width of 28 inches. Though the

Above: Completed hull of the *Royal Louis* model by Heller with masts still to be added.

high price of £4 8s 11d (postage extra) and the complexity makes this a kit more for the advanced ship modeller, we see no reason why it should not be completed to 'showcase' standard with care and patience even by a beginner. N.C.L.H.

NEW CATALOGUES

A VAST number of 1970 catalogues from various manufacturers have recently appeared, many for railway items. We have had beautiful productions from Kibri (2s 6d) and Vollmer (2s 6d), each printed in colour throughout and with pages of scenic and building kits illustrated in HO and N scales. Railway modellers should not miss these. On the railway side we have also received the 1970 Trix/Minitrix Catalogue (2s 6d) which again should not be missed by railway modellers. New items in N gauge are very apparent in all these catalogues, and Beatties of London, 10 The Broadway, London N4, have catered for the growing interest in this tiny scale by producing a useful 'N Gauge' book which forms a sort of master catalogue of all available N gauge models. For 2s, postage extra, it's a handy little publication to have if you are interested in this range of model railway items. Tamiya have produced an excellent glossy catalogue showing all their tank and car models with much else besides in the way of illustration. Of interest is news of a 1:70 range of Apollo space items including the complete command module with interior detail, which 'flies' by means of a transparent propeller and a string to keep it in 'orbit' round your ceiling! Price of the catalogue is 3s 6d post paid. Finally, there is a lavish catalogue from Bandai of interest to car modellers, showing all their large scale kits. All these catalogues can be had from Jones Bros at the prices stated. C.O.E.

MORE SOLDIERS

FROM Douglas Miniatures, by way of the distributors Ernest Berwick Ltd, 11A Newland Street, Kettering, Northants, we have received a set of the latest 20mm size (OO/HO) lead soldiers released by the firm. This is for the 'Marlborough and Seven Years War' period and the infantry set consists of a firing musketeer, a musketeer at the 'ready', firing grenadier, grenadier at the 'ready', officer with pike, and a standard bearer with a sword. The figures are sold in groups of five figures (all the same type or assorted to choice) for 6s a set and there is a free 'bonus' of an officer or standard bearer offered with orders of four sets or more. There is also a cavalry set of horse grenadiers or dragoons, sold two to the box (ie, two horses, two riders) also for 6s a time. In our view these are the best

Douglas figures yet and as our picture shows, they make a most attractive group either for dioramas or wargames. They are not supplied painted, but painting instructions are included with each set. At just over 1s a figure these are exceedingly cheap as lead figures go. A Douglas catalogue is also available from Berwick for 11d in stamps. C.O.E.



Above: The new Douglas models reviewed here.

LATEST CARS

FOUR new Corgi releases are all superb examples of the highest standards of diecasting. There is a Ford Capri 3000GT in full competition trim and authentically finished as Roger Clarke's car in the Ford Rally trim. The characteristic sponsor stickers are included, the doors open, and the seats fold. Competition wheelhubs are another feature. Price is 8s 11d, and a similar model is available in ordinary road trim for 8s 11d. Next comes a very cleverly designed Massey Ferguson tractor model fitted with a Fleming circular saw attachment with flexible drive. The saw actually rotates as the model is pushed along. Price is 14s 11d. Beautifully finished for 12s 6d comes a realistic model of the Rolls-Royce Silver Shadow, complete with removable wheels, jacks, opening doors, folding seats, dummy engine, opening boot, spare wheel, and full internal detail. This fine model is well worth having if you are a car enthusiast. Lastly, there is an equally good model of the Lamborghini Miura, once again packed with all the usual Corgi working features, including opening boot and bonnet, and detailed wheels. Price of this model is 11s 6d. C.O.E.

FOR WARGAMERS

AN attractively produced booklet, *Western Gunfight Wargame Rules*, is available from the Bristol Wargame Group, 102 Cotham Brow, Bristol 6. It is packed with ideas for Wild West fans and includes extra material on weapons, models and further references. Price is 4s, post paid. The Wargames Research Group has published a supplement to its *Ancient Rules* (reviewed last year) which deals with 14th/15th century warfare. Price is 5s 6d, post paid from 75 Ardingly Drive, Goring-by-Sea, Sussex. C.O.E.



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Minimum charge 2/-, Over 70/- free.
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photoPAGE

More rare pictures from readers with captions by Michael J. F. Bowyer. A free Airfix kit is awarded for every picture published, but please note that there is usually a delay of some months before publication due to the limited space at our disposal.



Above: Mosquito FBVI of No 13 OTU Middleton-St-George in 1946. Coded L-FV in white or very pale grey, it is RS657 and is fitted with RP rails.

Right: At APS Lubeck in 1946-47 was this Martinet QK-F (others were similarly marked QK-H and QK-G) of the target facilities squadron. Serial not known. Left: Meteor III 4D-S:EE459 of 74 Sqn at Lubeck at the same time.

Left: Anson SL-E, with astro-dome and extended 'bomb aimer' nose, was silver overall with black A/D panel on nose. Note the roundels to non-standard proportions. Serial is not known but ended in -57. It belonged to the Air Navigation School at Middleton-St-George in 1946. All these pictures are by P. J. Bullivant.

New Books — from page 531

the 8th Air Force to the end of hostilities, illustrated by a magnificent selection of photographs. The men, machines, targets and anecdotes have been skilfully welded. Group histories, famous personalities, aircraft markings—all are fully dealt with in the appendices. Colour drawings depict aircraft of many units, and it is pleasing to see that often these are of unnamed machines of which there were so many.

The colour pages are particularly interesting for they show, for example, P-47s in their varying shades of grey and green. This is a real touch of authenticity such as could only be recorded by one of the handful of people who bothered to make such records. Fortunately the author has not been misled like some to quote blithely from official orders where markings are concerned; he is clearly too well versed in his subject to rely on official records only.

On page 3 the wealth of pictorial illustration opens with a B-17 of the 91st taking off from Basingbourn (writes Michael Bowyer). I was particularly interested in this for she was one of the many I had climbed aboard. One point that at once arose was the nose inscription. I recorded her as 'Stryctnine' which was her name at the time. I was interested to read mention of the under surface colourings of the early B-17Es. Most of these were a light blue-grey shade but when, on August 5, 1942, I was taken on a personal tour at Grafton I noted three aircraft wore the green shade of sky common to RAF light bombers. These early B-17Es, incidentally, had deep yellow fin serials, whereas a few months later serials were canary yellow. This book has a most fascinating section devoted to detail comments on unit markings by Groups, again gathered by the handful of enthusiasts in East Anglia.

This beautifully produced book is one that the owner is likely to turn to many times, and is a magnificent tribute to the mighty 8th.

Model soldiers

OLD BRITISH MODEL SOLDIERS, 1893-1918, by L. W. Richards. Published by Arms & Armour Press Ltd, 677 Finchley Road, London NW2. Price 30s.

A MUST for model soldier fans, this little book is packed with 60 full-page plates, each showing dozens of the model

soldier sets made by Britains and other British model manufacturers of 50-70 years ago. It almost forms a catalogue of the models of those days and, indeed, the appendix includes full listings (as far as possible) of each manufacturer's output for the period covered. All the models shown are now valuable collectors' pieces and the author of this work is the acknowledged authority on this particular aspect of the model soldier world, as members of the British Model Soldier Society will know. Britains were probably the first firm to put on the market toys which were also scale models, and this fascinating book records their early products in a splendid style.

For military enthusiasts

SEMI-TRACKED VEHICLES OF THE GERMAN ARMY, 1939-45; PART 2, by Peter Chamberlain and Hilary Doyle. Price 8s plus 6d postage.

MILITARY VEHICLE DATA, compiled by M. Conniford. Price 5s.

MILITARY VEHICLE PRINTS, Nos 20 and 21. Price 5s.

All published by Bellona Publications Ltd, Hawthorn Hill, Bracknell, Berks.

LATEST in the Bellona Handbook series follows the format of the previous titles in this series. It is packed with numerous rare pictures of all variants of light half-track of the Sd Kfz 250 series (including stowage arrangements) plus miscellaneous other light types. With authoritative text and plenty of data it should not be missed at its modest price.

The well-known Bellona Military Vehicle Prints take on a new enlarged size from No 20 and include selected 1:48 scale views as well as the usual 1:76 scale multi-views. No 20 deals with three versions of the Pz III and the entire A13 British cruiser tank series, making a total of six vehicles in one book. Twice as many pictures, larger text, and better reproduction more than justify the slight increase in price. No 21 includes the Marder, Tortoise, Light Tank Mk IA (and variants) and the T3 75 mm SP gun, again all in the new format. Finally, Bellona introduce a new series, this time dealing with motor transport in a similar style to their tank books. Each vehicle has a two-view 1:76 scale drawing, pictures, notes, and data. Highly commended, the first includes the Dodge Weapons Carrier, DUKW, and seven others.



Above: Fine view of an all-silver Harvard C-YQ:KF997 of 616 Sqn, RAuxAF from Framlingley, seen at Linton-on-Ouse in winter 1951-52. It has black cockpit framing, walkways, and A/D panel. Picture by D. Schofield.

Letters to the Editor

More LEM details

WITH reference to the letter from D. Ewart in the April issue of *Airfix Magazine*, I also recently bought the Airfix kit of the LM and decided to cover the descent stage with foil. In the special edition of *Life* magazine 'To the Moon and Back', one close-up photograph of the LM on the moon shows the memorial plaque on the front primary shock-absorber strut and includes the foil covering. This is aluminium foil not gold as suggested by D. Ewart although it does appear to be gold-coloured on more distant photographs but this is surely caused by the reflection of the lunar surface on the aluminium.

D. Ewart also says in his letter that the landing pads are only foil covered on their upper surface but the *Life* photographs show foil covering the bottom of the pads as well. These photographs also show the forward thrust deflector panels fixed vertically to the descent stage, not to the ascent stage as in the model—D. Ewart may have been led to assume that they are fixed horizontally by the support strut for the ascent engine fuel tank.

The Airfix kit of the LM is the best on the market at the moment but I suggest that two alterations be applied, ie, the docking target (part 71) is shown on the main illustration to be facing outward at right angles to the main axis of the craft, but it should be pointing at 45 degrees aft and inwards (approximately towards the rear VHF aerial part 68)—see *Flight International* magazine for Feb 6, 1969. Page 217. The transfer supplied for the right side of the descent stage should be cut in half and the 'UNITED STATES' applied to the left side.

Richard Cook, RAF Medmenham, Bucks.

G-ASJT

PLEASE note that HSA 748 'Juliet Tango,' page 364 and 365 *Airfix Magazine*, April 1970, was operated by the Aviation Division of Smiths Industries Limited.

As you say correctly this aircraft was based at Staverton near Cheltenham. Although it had been used primarily for experimental flying and had very low engine and airframe hours, it was used on a number of long distance demonstration tours. For example, it was operated on the Great Circle route through Iceland and Greenland to the United States. During its time with Smiths Industries the rear cabin had twelve 'first class' passenger seats and there were another four seats for passengers immediately behind the crew stations. The main 748 passenger cabin was used for experimental equipment.

L. F. E. Coombes, PRO, Smiths Industries, Aviation Division.

Gnat colours

Following M. J. F. Bowyer's most interesting article 'Colours 1969' in the March edition of *Airfix Magazine*, may I be allowed to comment upon certain modifications which have been made to the

Letters to the Editor selected for publication entitle the senders to each receive a free Airfix plastic construction kit of their choice. We are always pleased to receive your comments and pictures, which will be considered for publication. Submitted material and pictures can only be returned if accompanied by a stamped addressed envelope, and the Editor cannot accept responsibility for safe keeping of any such contributions, neither does he necessarily agree with comments expressed by correspondents in the letters column. Please note that any letters anticipating a reply MUST be accompanied by a SAE or stamp.

paint scheme of Gnat T Mk 1 XR569:08 of 4 FTS, illustrated schematically on page 335.

In August of 1969, I recorded this aircraft at RAF Valley and at that time it carried, in addition to the normal areas of High Visibility Dayglo Red, a completely Red fuselage spine; and the rear half of each upper wing surface was similarly painted. Control surfaces retained their light grey colouration. The 4 FTS badge was carried both sides of the fin, but the small '08' code on the fin had been deleted. Other, smaller, details included the painting of the forward upper fuselage UHF aerial in Dayglo Red and the overspraying in the same colour, of the black stencilled instructions on the wing tanks, the forward tips of which were in light grey. The rear UHF aerial was light grey with a band of dark blue. Two panels flanking the rear aerial were not painted red, the forward one being in White, whilst the rear one was light grey with a narrow black edging. The diagram below illustrates the scheme.

By early 1970, '08' had been repainted in the new RAF Training Command Scheme of Red/White/Grey, but again the machine did not fully conform in that whereas although the remainder of the Gnat fleet already painted have both upper and lower areas of their mainplanes in Light Grey, '08' retains this colour only on the wing undersurfaces, the complete above-wing area being in red. The Red used is the same shade as used for the fuselage. Control surfaces remain light grey.

W. J. Jones, Caernarvon, North Wales.

Canadian markings

I WAS very interested in Michael J. F. Bowyer's 'Colours '69' in the March issue, but feel that a few points should be made about the Canadian markings described. First, the 'CAF' on the CF-104 Starfighter is now standard with operational aircraft of the Canadian Armed Forces, 'RCAF' no longer applying as the Canadian services were officially united in 1967. Also, the 'Forces Armées Canadiennes' mentioned on the CF-104 should be counterbalanced by a similarly-coloured 'Canadian Armed Forces' on the port engine intake. Again, most operational aircraft should carry these markings, and to date I have observed this marking on CF-5As, CF-5Ds, Voodoos and Arguses of the Canadian Armed Forces. This is the first instance, however, in which I have

heard of such markings in the European squadrons.

Modellers might also be interested in a simple conversion of the CF-104. The two (soon to be one) Canadian reconnaissance squadrons in Europe have a detachable reconnaissance pack fitted to the forward fuselage for tactical surveillance. This pack may be easily modelled in either balsa or plastic card.

Photographs will doubtless provide accurate dimensions. The cameras in this pack are carried in the front and bottom. Unfortunately, I have no information as to which Canadian squadrons carry this pack.

Finally, one very minor point. The F-5B 'Talon' featured in February's Photopage is just an F-5B, the 'Talon' being the T-38A advanced trainer which differs in a number of ways from the F-5B two-seat conversion of the standard F-5A.

Stuart Sutherland, Quebec, Canada.

B-24 Identified

MY letter consists of two main parts. First of all concerning the 'Photopage' of the February 1970 issue of *Airfix Magazine*, the B-24 (42-78595) I can narrow down to the 49th Bomb Wing of the 15th Air Force. Since there are no tail markings, I cannot tell which group, but the number '56' places the aircraft in 826th Squadron of the 484th Bomb Group, or 766th Squadron of the 461st Bomb Group, or 726th Squadron of the 451st Bomb Group. It is difficult to tell from a black-and-white photograph, but the engine cowls should be green. I got my information from *Fifteenth Air Force Combat Markings 1943-1945* by E. A. Munday published by Beaumont Publications, London.

The second part of my letter concerns the article on the F6F Hellcat in the same issue. The photo caption for Hellcat F1 (JV141) states that it belongs to 1839 Squadron, but the drawing of JV141 on the next page states that it belongs to 1832 Squadron. Please let me know which is correct.

R. H. Haley, Barstow, California, USA.

'1832 Sqn' is correct—the error was due to a misprint—EDITOR.

Track trouble

I WOULD like to offer the following hints to readers of *Airfix Magazine*.

It would seem to be the experience of a number of people, including myself, that some of the excellent Japanese tank kits now on the market suffer from the fact that the rubber tracks have a tendency, after a few months, to perish and crack. I have found that this trouble can be prevented by removing the tracks from the tank every couple of months and spraying them with 'Holts' Rubber Lubricant. This is obtainable in aerosol form from most car accessory shops.

A cheap and realistic way of fitting wire hawesers to 1:35 or larger scale AFVs is to purchase from the local store a packet of

Continued on next page

Letters—continued

stranded brass wire sold as picture hanging wire. A packet costs about 2s 3d and contains around 20 ft. Eyes can be formed in the ends and whipped with fine fuse wire after which the hawser is painted and fitted to the vehicle. The effect is most realistic and certainly adds to the look of the finished tank.

N. Sudron, Yarm, Yorks.

Spitfire details

HAVING received much information and pleasure from *Airfix Magazine* in the past, I am glad to be able to return the compliment.

I have recently converted an Airfix Spitfire IX to a 16, but used a slightly different method from Alan W. Hall. I used the 'teardrop' canopy from the Hawk Spitfire 22—taking the chance to combine that kit with the Airfix canopy to produce a Mk 21. I did not remove the entire fin unit but only the rudder: when the dorsal surface is removed from the rear fuselage, the presence of the fin provides better location for the two fuselage halves.

These procedural difficulties aside, I did find several items to query in Alan Hall's article (a most uncommon occurrence!).

(1) I extended the oil cooler rather than move it forward, as surely the oil cooler on the 16 was of the late 'all climates' type used on the Mk VII, VIII, and late IX, replacing the earlier, clumsier, Vokes and 'Aboukir' filters for the tropics. If I was wrong, I would appreciate correction.

(2) Mk XII conversion. It is necessary to shorten the nose of the Frog model: note the panel lines on the engine cowling as a guide. (This shortening will also be necessary for Seafire XV and 17). It is possible to use the Airfix main and rear fuselage for the Mk XII as half the 100 built were based on the Mk V fuselage rather than the Mk VIII.

(3) Mk XI conversion. The important point to watch in this conversion is the shape of the windscreen. The flat bullet-proof pane of the fighters is not fitted, the screen being of a more rounded shape. This can be seen clearly when looking at the Shuttleworth Mk XI. The Airfix canopy is perhaps too thin to work to the correct shape: it may be possible to round off the Frog canopy more easily.

(4) Mk VII conversion. As for the Mk VIII, the ailerons do not extend quite so far outboard as on the Mk IX. This point should be visible by comparing Frog and Airfix wings—I don't know whether it is or not.

(5) Mk Vc conversion. Surely a slip! The Vc had the same wing gun arrangement as the Airfix IXc, the Vb did not have the outer stub, and the Va had no cannon at all (and hence no fairing).

A. Graham Boak, St Albans, Herts.

Painting spokes

I WOULD like to submit a tip that may be of use to readers.

I have found while making car models in the 'Elite' range that the spokes on cars like the James Bond DB5 do not look realistic. To overcome this I put matt black paint on the spoked area of the wheel. Before the paint dries the black paint is wiped off each spoke. This can also be done with standard car models. After painting the spokes silver they are given a coat of varnish. When dry the black paint is added,



This very fine model of the Airfix Biggin Hill is finished in authentic Southern Railway finish of 1946-47 vintage. It is ballasted to 16 oz for free running with a motorised tender. 'Southern' plate on the smokebox door is from a metal washer. Model by R. Rushton.

then is lightly wiped off. I hope this will be of some use to readers for the effect is very pleasing.

N. J. Bowers, Reigate, Surrey.

New marking

ANYONE modelling the BAC Lightning F Mk 6 in 5 Sqn markings may be interested to know that an extra marking has been added to the tailfin. This is a large number '5' painted in the same red as the nose insignia bars. The five is about an inch thick, and is painted around the white disc which supports the squadron's green maple leaf badge.

Keith Horsewood, Grimsby, Lincs.

Wrong colour

THANK you for an excellent magazine and especially the articles on naval modelling by Peter Hodges. However while reading through 'Make a Signal' (March 1970), I noticed that the colouring of the pre-1948 Naval numbered pendants No 4 in the article is green and white whereas on checking with the 1937 *Admiralty Manual of Seamanship* the colour of this pendant is black and white. Please could you tell me which is correct?

A. C. Lineker, Lytham St Anne's, Lancs.

Our drawing was wrong—black and white was the correct colour—EDITOR.

Spitfire fittings

I WAS very pleased and interested to see the excellent article by Alan W. Hall in the May issue of *Airfix Magazine* on Spitfire conversions.

I would like to mention a couple of points:

(1) Captions under the header photograph and two of the diagrams mention the length of the oil cooler which is in fact the carburettor air-intake fitted with a Vokes air cleaner. The oil cooler was housed in one of the wing radiator fairings together with a main engine block radiator. The other fairing under the other wing housed the other engine block radiator and the supercharger intercooler radiator. I have enclosed two pictures (reproduced here)



which show the air-intake both with and without the cowlings.

(2) Of interest in one of the prints is the bomb rack fitted to the port wing.

Eric C. Winch, Cheshunt, Herts.

Gun emplacement

I recently purchased an Airfix Gun Emplacement, and found it a very good kit. The firing gun is a good idea, but it has hardly any detail. With mine, I omitted the firing gun, cut off the two gun mounting clips, and replaced it with the Airfix 88 mm gun, complete except for the base mount and shield. This gun looks much better than the original one, and looks much more realistic.

K. Pike, Kingston-on-Thames, Surrey.

Marauder identified

WITH reference to the Marauder III, coded 'L', which appears on page 326 of the March 1969 *Airfix Magazine*, this aircraft carried the serial FB 518, with the letter L repeated on the fin. My photo



was, I believe, taken in Italy in 1944, or 1945.

I hope this additional information will be of help to anyone who is interested. Unfortunately my knowledge of the squadron is nil.

I. Ramsden, Dewsbury, Yorks.

Smooth finish

AS an answer to the problem in obtaining realistically smooth and dust free finish on gloss painted models, I have been using the following method. Give the model several very thin coats of matt paint, lightly rubbing down between each one with the very finest 'wet and dry' paper, and dusting off. The last two coats should be of either gloss paint or varnish, still rubbing lightly down after each thin application. The final finish is worked up using a mildly abrasive car cleaner such as Jove or Simoniz Kleener, on a soft damp rag. It is true that some recessed detailing is filled and other proud standing items are flattened, but as these are usually overscale the result is not unpleasant. Indeed the raised items, so treated will often lose their gloss or even show through, the base plastic, which can be carefully lined in with black or other suitable colour. The result strikes a subtle balance between an immaculately polished finish and a good model marred by dust specked paint.

K. J. Lilleyman, Rugby, Warks.



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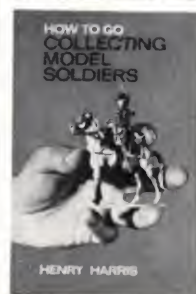


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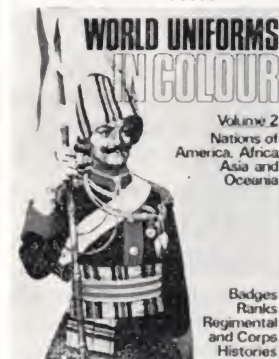
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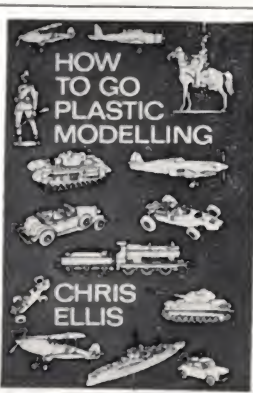
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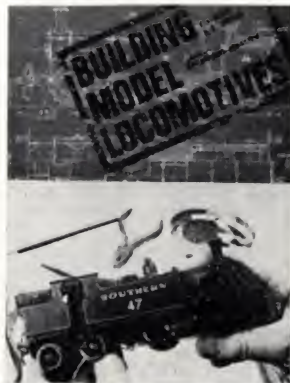
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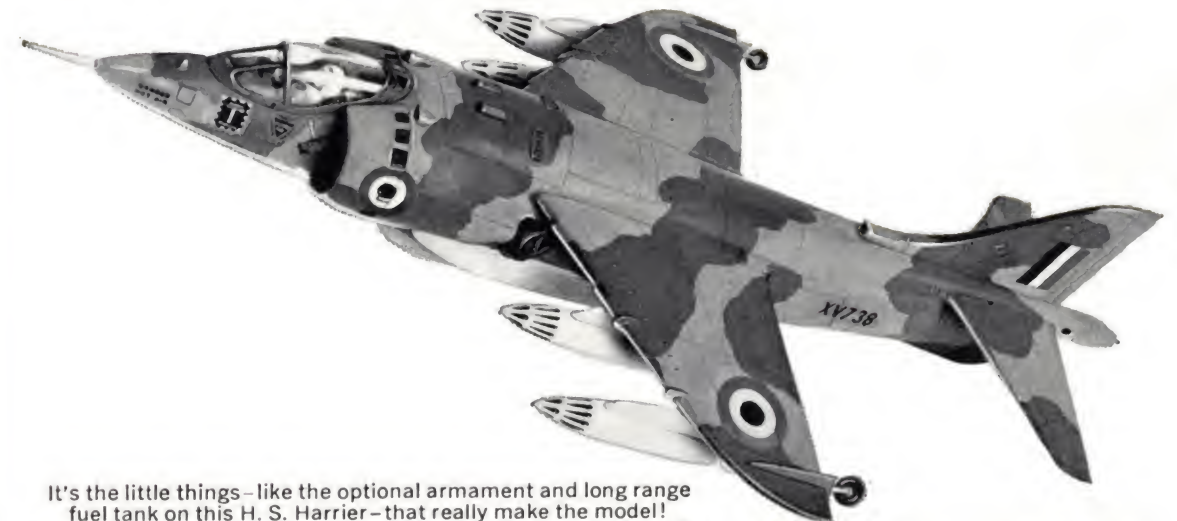
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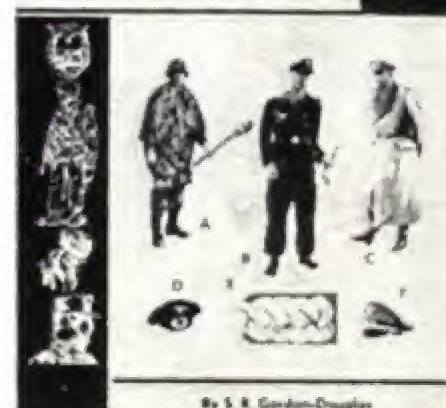
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